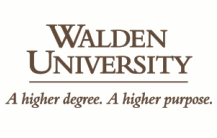

2015

The Expectation of Emotional Strength and its Impact on African American Women's Weight

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This is to certify that the doctoral dissertation by

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has been found to be complete and satisfactory in all respects,
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Abstract

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MA, Texas Woman's University, 2005

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Dissertation Submitted in Partial Fulfillment

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Abstract

African American (AA) women have the highest rates of obesity and weight-related diseases of any other cultural group in the United States. The purpose of this study was to examine the relationship between acceptance of the Strong Black Woman (SBW) cultural construct and the following weight-related health factors: body mass index (BMI), high blood pressure, stroke, and diabetes mellitus (DM). The hypothesis was that a positive relationship exists between accepting the SBW persona and weight-related health factors. The theory of womanism was used to guide this study. Convenience sampling was used to recruit 127 AA women to participant in an online survey. Descriptive statistical analysis was performed on the demographics. Multiple regression analysis was conducted to evaluate the research questions. The affect and regulation subscale from the Strong Black Woman Cultural Construct Scale was used to measure mental and emotional strength. Willingness to ask for help was measured using the General Help Seeking questionnaire original version. The Emotional Eating Scale measured eating behaviors in response to anger, frustration, depression, and depressed mood. The Perceived Stress Scale measured perceived stress. The results of the analyses revealed that mental and emotional strength were significantly related to BMI and high blood pressure. There was no significant relationship found between mental and emotional strength and heart disease, stroke, and DM. This study could provide useful information for future weight management treatment for AA women. Positive social change is implied because understanding weight gain in this population may help to decrease the incidences of obesity and associated weight-related illnesses.

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Dedication

I want to dedicate my dissertation to my family. They showed me unconditional support and patience during this process.

Acknowledgments

I want to thank my committee member, Dr. Carolyn King, who provided support, encouragement, and guidance during this process. I also want to extend my thanks to my committee member, Dr. Peggy Gallaher, for her support and guidance. Both of you have helped me develop my skills as a researcher and I will be forever grateful.

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Chapter 1: Introduction to the Study

Obesity is on the rise in America (Kirby, Liang, Chen, & Wang, 2012). Some researchers have reported that an obesity epidemic has been occurring, and that unless measures are taken to reverse this trend, people will have shorter life spans and higher rates of weight-related health problems than people have had previously (Flegal, Carroll, Kit, & Ogden, 2012). Statistics have indicated that obesity is especially problematic among African American (AA) women, who had have the highest rates of obesity among all cultural groups in the United States (Johnson & Lee, 2011; Kirby et al., 2012; Lee et al., 2012; Nicholson & Browning, 2012; Phelan, Link, & Tehranifar, 2010).

The problem of obesity among AA women warrants additional research to increase understanding about why AA women disproportionately experience obesity. Some researchers have focused primarily on a diet and exercise approach to weight loss, implying that if individuals control what they eat and how much they exercise, then they will be successful in managing their weight (Barnes & Kimbro, 2012). Although a calorie-in-calorie-out approach is an appropriate approach for weight loss, other factors may at times hinder people from following plans based solely on diet and exercise (Conn, Phillips, Ruppar, & Chase, 2012). Some researchers have found that addressing other cultural factors such as body image, acceptable body shape, and ideals of beauty have been beneficial in helping AA women address their weight goals (Baird et al., 2007; Chandler et al., 2009; Gordon, Castro, Sitnikov, & Holm-Denoma, 2010; Oney, Cole, & Sellers, 2011; Patton, 2006; Rogers, Wood, & Petrie, 2010; Schuler, 2008). A cultural approach to understanding weight gain could be beneficial in decreasing the obesity rates

for AA women because cultural norms are a significant element in regards to what is considered a preferred body type, a typical diet, and the general attitudes about health and wellness (Lopez et al., 2014). Examining other cultural factors, therefore, may provide insight into how AA women may manage their weight in ways that that are applicable to their specific cultural challenges (Olander et al., 2013). As specific cultural factors are explored, researchers can begin to develop culturally sensitive treatments that may be more effective for AA women than are programs that do not include cultural factors (Talleyrand, 2012). Therefore, understanding specific cultural factors contributing to obesity among AA women could create positive social change for this group.

Only a few cultural issues that are specific to AA women and weight have been the focus of research (Beauboeuf-Lafontant, 2005; Woods-Giscombe, 2010). One cultural factor that may contribute to the high rates of obesity for AA women is accepting the persona of the strong Black woman (SBW; Beauboeuf-Lafontant, 2005; Woods-Giscombe, 2010). The SBW is an AA woman who upholds the cultural expectation to remain emotionally and psychologically strong in all aspects of her life (Walker, 1967). African American women who attempt to uphold the image of the SBW typically will not show signs of emotional distress or ask for help. Therefore, AA women who abide by the SBW construct may experience more chronic stress than women who do not adhere to the cultural construct of the SBW (Woods-Giscombe, 2010). Researchers have provided support for the idea that chronic stress is often more prevalent among AA women and can also be related to obesity (Sutherland, 2013). It is important to understand the ways in

which accepting the SBW persona may contribute to obesity because this cultural construct could be an important factor in weight gain for AA women.

The idea that the SBW persona may affect weight is important to study because having a precise understanding of the specific cultural issues related to weight gain could help reduce the growing obesity epidemic with AA female population. This understanding might allow health care providers to address a specific cultural component of obesity with AA women. The potential for creating positive social change is implied in this study because understanding weight gain in this population may help to decrease the incidences of obesity and weight-related illnesses. The findings from this research could lead to positive social change by providing evidence to healthcare professionals that a cultural approach to weight loss, using a theoretical orientation such as womanism, (Collins, 1996; Boisnier, 2003; Karenga & Tembo, 2012; Littlefield, 2003; Smith, 2008) could be more effective than traditional approaches when the causes of the weight gain are psychological in nature (Boisnier, 2003; Collins, 1996; Gourdine, 2009; Hamilton-Mason, Hall, & Everett, 2009; Jones, Hardiman, & Carpenter, 2007; Karenga & Tembo, 2012; Littlefield, 2003; Smith, 2008; Wilson & Washington, 2007; Williams, 2005). Womanism is a theory used to examine AA women in a manner that incorporates their heritage, history, culture, and ethnic identity (Boisnier, 2003; Walker, 1967). This chapter includes the background of the study, problem statement, purpose of the study, research questions and hypotheses, theoretical framework, nature of the study, definitions, assumptions, scope and delimitations, limitations, significance, and a summary.

Background

A dearth of quantitative research exists in the areas of cultural issues, race, and weight loss that focus primarily on the AA female population (Beauboeuf-Lafontant, 2005; Capers, Baughman, & Logue, 2011; Davis et al., 1999; Henrickson et al., 2010; Kirby et al., 2012; Reel, SooHoo, Summerhays, & Gill, 2008; Young, Gittelsohn, Charleston, Felix-Aaron, & Appel, 2001; Woods-Giscombe, 2010). This population warrants research attention because AA women are disproportionately afflicted with weight-related health issues that negatively affect their quality of life and often result in premature death (Wilson & Washington, 2007). Because culture is a factor that has frequently been associated with weight gain (Ard et al., 2013), studying cultural constructs specific to AA women may facilitate understanding about why AA women have been disproportionately afflicted with weight issues. Ard et al. attempted to determine if there was a response pattern regarding weight-related issues that could be attributed to the AA or European American (EA) culture. They found distinct patterns for AA and EA women that could be used to design weight reduction treatments addressing specific weight-related cultural issues.

Wilson and Washington (2007) encouraged researchers to investigate the health issues that plague the AA community from a cultural perspective. In addition, both Ard et al. (2013) and Gourdine (2009) theorized that the most effective way to combat the health issues within the AA population is to conduct research that is derived from an AA framework, rather than a multicultural framework. Along the same lines, Williams (2005) provided compelling arguments about why multicultural theories failed to address the

cultural issues faced by AA women. Multicultural theories address different forms of oppression as separate categories. However, many marginalized people belong to more than one group, and thus, viewing the effects of racism, sexism, classism, or sexual orientation in isolation is unrealistic. Due to the idea that multicultural theories do not capture the dynamic interactions of a variety of cultural identities, Williams suggested that clinicians must be willing to explore cultural theories based on African culture and cultural feminists' approaches when counseling AA women on issues that are of importance to them. For example, race, gender, and socioeconomic factors affect the health of AA women (Hamilton-Mason et al., 2009) and should not be ignored when working with this population.

One method to use when working with AA women would be to use the theory of Black feminism. Black feminism is unique to AA women because the intricacies of social issues are directly linked to the ways in which AA women experience social situations (Collins, 1996). Simultaneously investigating how AA women cope with racism, sexism, and classism are unique feature of Black feminism. For example, when trying to understand how AA women experience societal pressures, the Black feminist perspective includes the recognition that AA women are often the central focus of the family and their community (Collins, 1996). This understanding shows the importance of the role of AA women within this culture. This perspective helps one to conceptualize how interactions between the AA family and the outside world unfold and how issues are resolved. Although Black feminism provided a good starting place for AA women to begin to be understood, it remains essential that alternate theories based on the AA

women experience are used to improve the understanding of how this population experiences and reacts to a variety of social pressures and stressors.

Typically when a person is presented with a stressful situation they can use a variety of coping responses. Some coping responses are said to have more psychological benefit than others. For instance, asking for help, delegating tasks, or exercising offer more psychological benefits than criticizing one's self, avoiding a situation, or overeating. As previously mentioned, researchers have suggested that the SBW identity is associated with poor coping responses to stress. This may be in part because coping responses are often dictated by several factors such as how stressful one perceives a situation, the cultural expectations in regards to is considered acceptable ways to cope, and ones gender (Everett, Hall, & Hamilton-Mason, 2010). For AA women who ascribe to the SBW cultural construct it is not acceptable to cope by asking for help or by showing outwards signs of sadness, depression, or fear. These AA women have been taught to keep their emotions under control and carry on despite the psychological stress they may be experiencing (Woods-Giscombe, 2010). It should be noted that ongoing and unmanaged psychological stress has been associated with increased risk for obesity. Furthermore, ongoing psychological stress has been linked to negative coping styles such as overeating and a desire for sweet and fatty foods (Mwendwa et al., 2011). Researchers have found that individuals with chronic stress had higher rates of perceived stress, higher BMI, and also had higher rates of self-reported emotional eating (Tomiyama, Dallman, & Epel, 2011).

Some of the research regarding the unique psychological needs of AA women has pertained to seeking mental health services. Jones et al. (2007) provided information regarding the need for a culturally specific approach for AA individuals who sought mental health services for emotional and/or psychological support. Jones et al. suggested that AA women do not frame their problems in the same way as EA women. Due to these differences, a Western approach to psychological or emotional issues may not be as effective for AA women. These researchers provided evidence that using a culturally specific framework is not only needed but is in the best interest of the AA female population. Therefore, a culturally specific frame of reference, such as womanism, is needed to further understand the AA woman (Boisnier, 2003; Collins, 1996; Jones et al., 2007; Karenga & Tembo, 2012; Littlefield, 2003; Smith, 2008).

Some scholars have suggested that examining AA women, or any marginalized population, using a single overarching identity such as gender is overly simplistic. From this perspective, a theory that focuses solely on gender and equality, such as feminism, would not be effective in understanding the lived experienced of AA women. As noted by both Collins (1996) and Boisnier (2003), one of the differences between feminism and womanism is in regards to the choice of gender roles. Boisnier noted that the main difference between feminism and womanism deals with the expectation of the identity that a woman should accept. The womanist model encourages women to value roles that they choose themselves, but the feminist model rejects the idea that women identify with gender roles that are subservient to males (Beauboeuf-Lafontant, 2008; Boisnier, 2003; Collins, 1996; Miguda, 2010; Saguy, 2012; Smith, 2008; Winkle-Wagner, 2008).

Collins (1996) noted that feminism has an agenda that promotes Eurocentric issues, whereas womanism accounts for the unique cultural factors specific to AA women. In addition, although feminists are focused on issues exclusively related to women, womanism acknowledges the value of males and women coexisting (Boisnier, 2003). In comparison, using the term *Black feminism* highlights that AA women and EA women have different cultural agendas and goals. Collins suggested that AA women are better served by using the womanism approach. Womanism can be used to explain differences in the gender roles of AA women when compared to women of other ethnic groups (Karenga & Tembo, 2012; Littlefield, 2003; Smith, 2008).

With respect to the specific focus of the current study, womanism can be used as a way to understand the effects of the cultural expectation that AA women must remain emotionally resilient (Boisnier, 2003; Collins, 1996). Being resilient can be a positive attribute because this trait can act as a barrier during stressful times (Pinheiro de Paula Couto, Koller, & Novo, 2011). Thus, emotional resiliency is helpful to a certain degree, but a person must be given time to rest and recover from stressful events for the resiliency to remain effective (Ambriz, Izal, & Montorio, 2012). When a cultural expectation to be emotionally resilient in all situations exists, a person never has the opportunity to recharge. AA women, therefore, might use food as a socially acceptable means of dealing with the various levels of ongoing stress (Inzlicht, & Kang, 2010). If food is being used in this manner, then it could also explain, in part, why this population has the highest rates of obesity. Understanding the effects of the cultural expectation of

the ongoing resiliency that is tied to the persona of the SBW on obesity, therefore, warrants research attention.

Beauboeuf-Lafontant (2007) explained that, from a feminist perspective, a woman's weight can be viewed as a direct response to societal pressures and that weight is viewed as an outward manifestation of internal psychological disequilibrium. The feminist theory fails to take into account the effect that the AA culture plays in the dynamic between emotional strength and weight (Blue & Berkel, 2010; Boisnier, 2003; Joseph, 2009; Winkle-Wagner, 2008). On the other hand, the theory of womanism offers that AA women who accept the title of the SBW limit their ability to ask for and receive help from those closest to them. This factor might be a more pressing issue than might societal expectations (Walker, 1969). AA women are often viewed as an extension of their families and not as individuals. Many AA women accept this culturally defined position to be the source of emotional strength for their families, and do so without regard to their personal needs, health, or general well-being. Consequently, some scholars have suggested that overeating is a method that AA women have developed to meet their personal needs and to cope with daily stress. This method of coping occurs because the woman may not feel that she is able to ask for the help she needs (Beauboeuf-Lafontant, 2005). However, it remains unclear the degree to which emotional strength is related to weight loss, weight gain, and other weight-related health issues, such as body mass index (BMI), high blood pressure, stroke, and diabetes mellitus (DM).

Other cultural factors might also affect weight among AA women. Barnes et al. examined weight loss maintenance among AA women and found that the participants

who maintained their weight loss had positive support from others. Those who maintained their weight loss rejected the AA cultural norms suggesting that a higher body weight was more appealing than was a lower body weight (Barnes et al., 2007). In another study, Kirby et al. (2012) explained how obesity was higher among individuals who lived in communities that were part of their ethnic identities than among individuals who lived in other types of communities. Kirby et al. highlighted the idea that cultural expectations combined with one's ethnic identity could positively affect weight gain. Furthermore, factors related to oppression (sexism and racism) might be related to weight gain in AA women (Davis, Clance, & Gailis, 1999). Additional exploration must occur to determine if accepting cultural expectation, being able to ask for help, and having a support system affect weight gain and loss.

Cultural ideals about body size might also affect weight gain of AA women. AA women might be more prone to overeat than might other individuals because having a larger body type is more accepted in the AA culture than it is in some other cultures. Ard et al. (2013) conducted a study to examine the differences in AA and EA women in regards to dieting and body image and found that the AA women in this study were more accepting of having a higher body weight. AA participants reported higher levels of body satisfaction than did the EA participants, which supports the notion that eating and related weight gain could also be attributed to cultural beliefs regarding a preferred larger body type for AA women. Other cultural factors also play a role in weight management. For instance, AA women have responded more favorably to weight loss programs with a family support focus than they have to other types of weight loss programs (Charleston,

Felix-Aaron, & Appel. 2001, Samuel-Hodges et al., 2010; Young et al., 2001,). Thus, family support and assistance might relate to the use eating as a method to cope with stress among some AA women.

Although diet and exercise are factors that are related to weight loss and healthy living, research findings support the need to understand AA women's obesity from a cultural framework (Abrams, Allen, & Gray, 1993; Ard et al., 2013; Baird, Morrison, & Sleigh, 2007; Boisnier, 2003). For this reason, the theory of womanism offers an appropriate perspective to examine the issue of AA women's obesity. The theoretical approach of womanism incorporates many aspects of the AA culture to understand the impact that these factors have on AA women. More specifically, AA women are examined in relation to their relationships with others, their emotional strength, and their experiences. In addition, the theory of womanism encompasses the understanding that AA women have been traditionally depicted as a group of individuals who value remaining emotionally strong in most situations, and thus, tend to avoid asking for help. To broaden the understanding of the factors related to AA women's obesity and weight-related health factors, more information is needed regarding the cultural components of weight gain and to determine if AA women are using food as a coping mechanism in response to accepting the SBW persona.

Problem Statement

AA women have the highest rates of obesity and weight-related diseases of any cultural group in the United States (Tallyrand, 2006; Wilson & Washington, 2007). Therefore, to understand why the AA female population is outpacing other cultural

groups in the rates of obesity, examining how accepting the cultural construct of the SBW affects the obesity and weight-related health factors for AA women warrants attention. Health care providers cannot adequately assist AA women to recognize how the cultural construct of the SBW affect weight gain and obesity without increased understanding of how AA women cope with day-to-day challenges as they try to uphold the personification of the SBW (Barnes et al., 2007; Bécares et al., 2012; Fitzgibbon et al., 2011; Hardcastle, Blake, & Hagger, 2012; Jeffries, 2012; Jones et al., 2007). Without doubt, AA women are not the only population affected by obesity. Obesity is a major problem in the United States, as more than one-third of all adults are classified as obese (Ogden, Lamb, Carroll, & Flegal, 2010). The rates of Americans who are overweight or obese are projected to continue to rise over the next 20 years, which would cause a significant increase in obesity-related deaths and weight-related diseases (Kirby et al., 2012). Although obesity and weight-related issues occur across gender, ethnicity, and racial demographic groups, AA women continue to have the highest rates of obesity and weight-related diseases (Tallyrand, 2006; Wilson & Washington, 2007). Some researchers proposed that the primary reason for obesity is a sedentary lifestyle (Lee, Mama, & Lopez III, 2012). However, other researchers suggested that weight issues are directly linked to the stress that results from cultural stressors (Harrington et al., 2006).

Cultural stressors may be an underlying reason that AA women, in particular, have the highest rates of obesity and weight-related diseases when compared to other groups (Hamilton-Mason et al., 2009; Littlefield, 2003; Walcott-McQuigg, 1995). Cultural stressors for this population have mainly been defined by generalized issues of

racism, sexism, and socioeconomic factors (Davis et al., 1999; Henrickson et al., 2010; Kirby et al., 2012). Minimal research has been completed to examine specific cultural pressures that may contribute to weight-related issues among AA women (Ard et al., 2013). This dearth of research is a cause for concern because without a clear understanding of the specific cultural issues affecting AA women, health care providers will be ill-equipped to deliver effective culturally-based interventions (Talleyrand, 2012). More specifically, examining the ways in which cultural constructs, such as the SBW, affect weight for AA women' could lead to a better understanding of intricate social elements related to weight gain in this population (Beauboeuf-Lafontant, 2005). This new insight could provide this group with a new way to conceptualize cultural issues that have thus far gone unrecognized. In addition, this new understanding could be empowering for AA women, especially for those who have not been successful with a diet and exercise prescription for weight loss. Overall, this investigation may provide valuable insights and fill the current gap in the literature regarding how the embodiment of strength resulting from cultural pressures contributes to using food as a coping mechanism, and consequently, weight gain for AA women. More importantly, by filling this gap in the literature, AA women may come to understand that they are not destined to live a life complicated by obesity and weight-related health factors.

Purpose of the Study

The purpose of this quantitative study was to examine how the embodiment of strength, resulting from cultural pressures, is related to using food as a coping mechanism and weight gain for AA women. The dependent variables were as follows, weight-related

health factors (BMI, high blood pressure, receiving treatment for or being diagnosed with DM, receiving treatment for or being diagnosed with heart related disease, receiving treatment for or being diagnosed with stroke), the belief that AA women must remain mentally and emotionally strong in all situations (emotional strength), and the AA women willingness to ask for help in their daily tasks (help seeking). The independent variable were the use of eating behaviors as a means to manage cultural stressors.

Research Questions and Hypotheses

RQ1. Is there a linear relationship between emotional strength and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women?

$H1_0$: There is no linear relationship between emotional strength and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women.

$H1_a$: There is a linear relationship between emotional strength and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women.

RQ2. Is there a linear relationship between willingness to ask for help and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women?

$H2_0$: There is no linear relationship between willingness to ask for help and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women.

$H2_a$: There is a linear relationship between willingness to ask for help and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women.

RQ3. Are emotional eating and perceived stress predictors of weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women?

$H3_0$: Emotional eating and perceived stress are not predictors of weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women.

$H3_a$: Emotional eating and perceived stress are predictors of weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women.

Theoretical Framework

The theoretical framework for this study was womanism (Collins, 1996; Karenga & Tembo, 2012). This theory involves conceptualizing AA women in a manner that incorporates their heritage, history, culture, and ethnic identity (Boisnier, 2003), which promotes a culturally sensitive therapeutic approach with this population (Wilson & Washington, 2007). The underlying premise of the theory is that AA individuals should love their own race and not aspire to achieve the EA standards of beauty or accept EA cultural norms (Kohzadi, Azzizmohammadi, & Afrougheh, (2011).

Researchers who use a cultural framework specific to an AA view, such as womanism, understand that race and gender-based issues must be explored in unison

(Boisnier, 2003; Collins, 1996; Karenga & Tembo, 2012). The incorporation of race and gender provided a unique perspective when compared to multicultural theories in which race, gender, sexual orientation, and socioeconomic status are conceptualized as separate cultural conditions (Williams, 2005). The theory of womanism was relevant to this research project because this theory upheld the idea that AA women are influenced by their culture in ways that impact their health (Harvey, 2013). Additional research pertaining to the application of womanism offered clinicians the necessary insight needed to develop treatments that were culturally appropriate with the AA lived experiences, thus improving the likelihood of effective treatments (Wilson & Washington, 2007). This theoretical framework allowed for an understanding of the ways in which the AA women's weight was impacted by the cultural expectation to remain emotionally and psychologically strong, which could have been a factor in understanding the eating behaviors and subsequent weight gain occurring in this population (Beauboeuf-Lafontant, 2005). A more detailed explanation of the theory of womanism appears in Chapter 2.

Nature of the Study

The nature of the study was quantitative. I selected a quantitative method to advance the understanding of how the construct of emotional strength affects weight-related health factors of AA women. Emotional strength is the belief that asking for help is a sign of weakness in the AA culture. Emotional strength was measured by the level of self-reported stress the participants' gave to their cultural expected daily responsibilities in comparison to the participants' self-reported willingness to ask for help. The Strong Black Woman Cultural Construct Scale (SBWCCS) was used to measure SBW cultural

attitudes. This measure is a revision of the Strong Black Woman Attitudes Scale (SBWAS, Thompson, 2003).The revised scale consisted of 22 items (see Appendix A). The demographic questions in this study also came from the SBWCCS. The Emotional Eating Scale (EES; Arnow, Kenardy, & Agras, 1995) was used to evaluate eating behaviors in the context of negative emotions. The EES consisted of 25 items and three scales (see Appendix B). The Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983), the third measure, is a global indicator of perceived stress. It consisted of 14 items with responses provided on a 5-point Likert scale (see Appendix C). Willingness to ask for help was measured using question 1 from the General Help Seeking Questionnaire (GHSQ, Wilson, Deane, & Ciarrochi, 2005). Question 1 consisted of 14 subquestions with responses provided on a 7-point Likert scale (see Appendix D).

Eight questions from the Behavioral Risk Factor Surveillance System (BRFSS) were used to ask the weight-related health questions that pertained to high blood pressure, stroke, heart disease, and DM. These questions were answered with yes, no, don't know/ not sure, or refused (see Appendix E). The complete survey that was presented to participants can be found on Appendix F. This comparison was examined by comparing the weight-related health factors of the participants to their emotional strength score. This approach provided insight regarding the relationship between the weight-related health factors and the willingness to ask for help with daily responsibilities and use of disordered eating as a coping mechanism to alleviate cultural stressors. Because some forms of cultural pressures and expectations can provide a sense of unity within a community, it is imperative to understand to what degree cultural expectations begin to

negatively affect the eating habits and the weight-related health factors for AA women (Henrickson et al., 2010).

Convenience sampling was used to recruit 127 AA female participants to the study. Convenience sampling is a nonprobability sampling approach that does not involve attempts to identify a representative subset of the target population. It simply takes people or units that are readily available (Leedy & Ormrod, 2013). Respondents were selected from Blackdoctors.org (BDO). BDO is a free health resource for all groups, but is targeted more specifically to AA people. BDO is guided by health professionals who provide information on topics that are relevant to the health of AA individuals. The site is devoted to providing strategies, tactics, and health advice to help AA people live healthier lives.

This site has been designed to provide its consumers with access to a wide variety of up-to-date healthcare information. BDO offers health news, culturally specific advertisements, Find-A-Doctor search tools, and community blogs. The web site has sections specific to health conditions, healthy living, weight loss, food, videos, and topics related to health insurance. This organization reaches its members via their website, emails, social media sites such as Facebook and Twitter, and with their online newsletters. The BDO was selected as the method for reaching participants for this study because this organization targets AA individuals with diverse demographic characteristics who have an interest in health issues that impact the AA community ("What is blackdoctors.org," 2014). BDO has over 700,000 subscribers, which increased the likelihood of reaching the needed participants to partake in this research project. The

survey was created in the Survey Monkey online survey tool. A link to the online survey tool was generated and provided to the administrators of BDO. The link took potential participants to a page that provided information about the purpose of the study and the length of time needed to complete the study. To avoid social desirability response set, participants were not informed about the specific focus of the study (examining the relationship between the weight-related health factors and cultural stress induced eating, willingness to ask for help, and emotional strength in AA women). Specifically, the respondents were told that the purpose of the study is to better understand stress in AA women.

Definitions

Belief: Participants' self-report of their intrinsic understanding that they should behave in specific ways when fulfilling duties as AA women (Littlefield, 2003).

Body mass index (BMI): A measure of body fat based on height and weight that applies to adult men and women (National Institute of Health, 2013).

Emotional strength: Participants' self-reports in their belief that they must remain mentally and emotionally strong in all situations (Beauboeuf-Lafontant, 2005) as assessed by the study survey.

Help-seeking: Participants' self-report of their willingness to ask for help in their daily tasks (Beauboeuf-Lafontant, 2005) as assessed by the study survey.

Eating behaviors: Participants' self-report of using eating behaviors as a way to manage cultural stressors as assessed by the study survey (Henrickson et al., 2010). Eating behaviors are defined as eating in response to physiological hunger versus eating

in response to a stress-inducing situation, thought, or concern (Arnow, Kenardy, & Agras, 1995).

Strong Black Woman (SBW): The SBW is an AA woman who upholds the cultural expectation to remain emotionally and psychologically strong in all aspects of her life (Walker, 1967).

Weight-related health factors: Weight-related health factors have been defined in the medical community as medical conditions that are often attributed to a person's BMI being at or above 30 (Ogden et al., 2010). In the current study, these factors included: BMI, as well as treatment for or diagnosis of high blood pressure, DM, a heart-related disease, and stroke.

Willingness: Participants' self-report on the likelihood of engaging in specific tasks (Thompson, 2003).

Womanism: A theory used to examine AA women in a manner that incorporates their heritage, history, culture, and ethnic identity (Boisnier, 2003; Walker, 1967).

Assumptions

There were several assumptions that were made in the execution of this study. The first assumption was that the AA women were in a position to describe their weight-related health factors, their beliefs related to the need to remain mentally and emotionally strong in all situations, their willingness to ask for help in their daily tasks, and their extent of use of eating behaviors as a way to manage cultural stressors. The participants' ability to provide and describe their weight, mental and emotional states and their willingness to ask for help was critical to the meaningfulness of the study. Second, it was

assumed that the self-report of eating behaviors were relatively accurate and that any bias or inaccuracies would be uniformly distributed across the entire sample. It was also assumed that the SBWCCS was an accurate measure of SBW cultural attitudes. An additional assumption was that the EES was an accurate measure of eating behaviors in response to anger, frustration, depression, and depressed mood. It was assumed that the PSS was an accurate measure of perceived stress. It was assumed that weight-related health factors were an appropriate and accurate measure of a person's general health and life expectancy (Wilson & Washington, 2007).

In a like manner, it was assumed that the measurements used for this study were valid and reliable measures. An assumption was that participants accurately reported if they have been diagnosed with or were being treated for blood pressure, DM, heart related diseases, or stroke. It was assumed that participants provided accurate self-reports on their daily stress levels, daily activities, eating behaviors, and height and weight. It was assumed that participants attempted to answer all questions honestly. Likewise, it was assumed that participants had a good understanding of the questions being asked of them on the survey. Finally, it was assumed that this study could be replicated and that generalizability to like populations was possible.

The assumptions stated above were necessary for the integrity of this research project. The assumptions that the participants answered honestly were made based on the level of anonymity and confidentiality provided by using an online survey. The assumptions that the participants had the ability to understand the questions asked of

them were based on the reading level of the survey. The survey was written so that most people with at least a 5th grade reading level could understand and answer the questions.

Scope and Delimitations

The scope of this study included AA women from across the United States who were 18 years of age and older. This population was selected because obesity is more prominent in AA women when compared to any other cultural group in the United States. Womanism was the theoretical framework that was used because this framework takes into account cultural factors and issues related to gender. Other populations were excluded because I sought to understand factors related to obesity and weight-related health factors in AA women. Because this research targeted AA women, the findings from this research will only generalize to like populations.

Limitations

This study was limited by the quantitative design, as an online survey to gather the data for the research were used. The use of this design would not allow for detailed descriptions of the variables studied, but would allow for a statistical analysis of the data to test hypotheses. The study was also limited by the sample size of 127 participants who identified as being AA women 18 years of age or older. Findings can only be generalized to other AA women 18 years of age or older. Additional limitations included the convenience sampling procedure, which could have rendered my results to not be projectable to the general AA female population. The solicitation of Internet-only users could have also compromised the projectability of my results to the targeted AA female population. The use of BMI also has limitations, as factors such as age, sex, ethnicity, and

muscle mass can influence the relationship between BMI and body fat. BMI does not distinguish between excess fat, muscle, or bone mass, nor does it provide any indication of the distribution of fat among individuals (Rothman, 2008).

The use of the weight-related health factors had limitations because there were other measurements that could have been better indicators of obesity such as skin caliper or waist circumference measurements; but, these methods were not applicable for an online survey, as participants may not have had the equipment needed for such measurements. The use of self-report measures in general, and the use of the SBWCCS, EES, and the PSS measurement tools were limitations, as there could have been bias in self-reporting, and other measurement tools that were excluded may have been valid measures. Reasonable measures were taken to address the limitations by providing the participants with clear and precise definitions of the health-related weight factors.

Significance

Racism, sexism, classism, socioeconomic factors, food choice, lack of regular exercise, and a cultural preference for a larger body are suggested to be the primary reasons that AA women are more likely to be obese than are other individuals (Capers et al., 2011; Davis et al., 1999; Henrickson et al., 2010; Kirby et al., 2012; Reel et al., 2008; Young et al., 2001). Yet, there has been minimal exploration regarding the cultural expectation of emotional strength and whether the embodiment of this strength affects weight for AA women (Beauboeuf-Lafontant, 2005; Woods-Giscombe, 2010). With that understanding, this project is unique because I attempted to address this previously neglected area of research regarding the cultural expectation that AA women must

portray emotional strength in all aspects of their lives (Woods-Giscombe, 2010) and whether this factor affects their weight.

It is important to understand how this expectation of emotional strength could result in an ineffective coping style (Hamilton-Mason et al., 2009; Walcott-McQuigg, 1995) in which these women use food as a coping tool. To date, current researchers indicated a shortage of peer-reviewed literature on the topic of the cultural expectation of emotional strength for the AA woman and whether this expectation affects weight in this population (Beauboeuf-Lafontant, 2005; Tallyrand, 2006; Woods-Giscombe, 2010). The potential contribution of this study is that this study might inform the development of interventions or the way in which healthcare professionals interact with AA women.

Social Change Implications

By providing information regarding the effects of cultural expectations of emotional strength on AA women's health outcomes, this study might provide healthcare providers with another avenue to address weight-related issues with this population (Davis et al., 1999). The findings from this research could lead to positive social change by providing evidence to healthcare professionals that using an approach that takes into account cultural factors could be more effective when investigating the psychological issues associated with weight gain for this population (Boisnier, 2003; Collins, 1996; Gourdine, 2009; Hamilton-Mason et al., 2009; Jones et al., 2007; Karenga & Tembo, 2012; Littlefield, 2003; Smith, 2008; Wilson & Washington, 2007; Williams, 2005). To understand this issue further, it was also helpful to compare and contrast the ways in which AA women view obesity in comparison to other cultural groups. For instance,

when compared to EA women, AA women are said to have increased weight-related disparities that may be directly related to cultural influences (Ard et. al., 2013; Hill, 2009). It is possible that the cultural influences are contributing to the disproportionate growth and health-related consequences of obesity for AA women, which become more evident when this population is compared to other cultural groups such as EA women (Tallyrand, 2006; Wilson & Washington, 2007). The differences between the cultural groups can also be seen by the increased rates of high blood pressure, DM, and heart-related diseases with AA women.

Knowing that AA women have a higher likelihood of having weight-related health conditions makes a detailed exploration of the SBW cultural construct warranted. The findings from this research may result in an in-depth understanding of a specific consequence, related to the expectation of emotional strength, and how this factor relates to weight gain for AA women. Ultimately, this research could create social change by providing a more effective understanding of the specific cultural issues experienced by AA women. This understanding could be useful in creating health-related programs focused at decreasing the rates of obesity and weight-related diseases for AA women. This awareness could create positive social change, as these women could seek out more effective ways of coping, which could lead to making changes that are beneficial to living a healthier life. If AA women knew that there was a weight-management program that addressed the cultural and emotional issues related to their weight gain, this population might be more willing to seek out and remain in treatment for their cultural stress or

weight issues (Barnes et al., 2007; Jones et al., 2007; Samuel-Hodges et al., 2010; Smith, 2008; Williams, 2005).

Summary

In order to understand why AA women are disproportionately affected by obesity, the cultural variables of the issue that underlie the etiology of obesity in AA women, such as an acceptance of a larger body type (Fitzsimmons-Craft & Bardone-Cone (2012), the expectation of emotional strength (Beauboeuf-Lafontant, 2007; Bell, 2004; Gourdine, 2009; Hamilton-Mason, Hall, Everett, 2009; Jones et al., 2007; Lefkowitz & Zeldow, 2010; Woods-Giscombe, 2010; Woods-Giscombe & Black, 2010), and the stress related to being a double-minority (Davis et al., 1999; Harrington et al., 2006; Henrickson et al., 2010; Kirby et al., 2012) needs to be better understood. As specific cultural factors are explored, researchers can begin to develop treatments for obesity that are able to address the causes of obesity for AA women. Understanding specific causes of obesity for the AA woman is a step towards creating positive social change. Chapter 2 is a review of the relevant literature, and Chapter 3 is an explanation of the method that will be used to gather and interpret the data.

Chapter 2: Literature Review

Introduction

The problem of obesity with AA women needed to be researched to increase understanding regarding why AA women are disproportionately impacted by obesity. The purpose of this quantitative study was to investigate whether the cultural expectation of emotional strength combined with accepting the identity of the SBW contributed to weight gain for AA women. This chapter is a synthesis of information from studies that were conducted to investigate the ways in which a person's level of emotional strength affects health. In addition, the conceptual framework that was used to identify and conceptualize concepts related to the SBW was examined. Chapter 2 includes a discussion of the general aspect of the AA culture and rates of obesity. It also includes a detailed review of the literature on the cultural expectation of strength and the ways that this idea builds on myths that are associated with AA women. The role of the AA woman as a mother and family member was explored within the context of the ways that daily stressors and coping strategies affect the health of AA women. This chapter concludes with a detailed examination of ethnicity and health outcomes, including depression, weight, body image, weight maintenance strategies, and eating in response to stress.

Chapter 3 includes methodology used to measure weight-related-health-factors, the degree to which the participants accept the SBW person, coping strategies, and the participants' level of daily stress. Chapter 4 contains the results of the online research survey. Chapter 5 includes a discussion of the results and recommendations for future studies.

Obesity is a major health problem in the United States, with more than one-third of all adults being classified as obese (Ogden et al., 2010). The rates of people in the United States who are overweight or obese are projected to continue to rise over the next 20 years, causing an increase in obesity-related deaths and weight-related diseases (Kirby et al., 2012). Although obesity and weight-related issues occur across gender, ethnicities, and racial demographic groups, AA women have the highest rates of obesity-related and weight-related diseases of any cultural group in the United States (Tallyrand, 2006; Wilson & Washington, 2007).

Some researchers have proposed that a sedentary lifestyle is the primary reason for obesity (Lee et al., 2012). However, other researchers have suggested that the stress that resulted from global and cultural pressures is the main causes of obesity for oppressed groups. Even though it has been suggested that culture plays a role in the obesity issues for oppressed groups, researchers have given minimal attention to specific cultural constructs that may be contributing to the differences in rates of obesity between cultural groups (Ard et al., 2013; Clark et al., 2013; Gletsu & Tovin, 2010; Johnson & Lee, 2011; Kirby et al., 2012; Robinson & Butler, 2011; Young et al., 2001). Increased understanding of cultural factors that contribute to obesity requires an in-depth understanding of general cultural pressures such as racism, sexism, and classism. However, it is possible to understand this issue even further if specific cultural constructs are examined as well. Researching cultural factors should be considered as an important first step in understanding obesity among various cultural groups (Phelan et al., 2010; Williams & Sternthal, 2010). With that understanding, it is appropriate to explore how

social relationships (Umberson & Montez, 2010), cultural constructs (Conrad & Barker, 2010), and cultural expectations (Hill, 2009) interact in ways that affect health outcomes for racial minority group members (Phelan et al., 2010; Williams & Sternthal, 2010).

Cultural stressors for minority populations have been defined by generalized issues that often focus on racism, sexism, and socioeconomic factors (Davis et al., 1999; Henrickson et al., 2010; Kirby et al., 2012). However, as mentioned previously, minimal attention has been given to examining cultural pressures that contribute to weight-related issues among AA women (Ard et al., 2013; Clark et al., 2013; Kirby et. al., 2012; Kumanyika et al., 2007; Pazzagli, Mazzeschi, & Laghezza, 2013; Robinson & Butlet, 2011). Without a clear understanding of the cultural issues affecting AA women, providers are ill-equipped to deliver effective culturally-based interventions (Talleyrand, 2012). Culturally-based interventions are said to be more effective when working with individuals from racial minority groups. Therefore, it is imperative that professionals do their due diligence to provide care that has been empirically proven to be most effective (Barrera, Castro, Strycker, & Toobert, 2013). The research supports the idea that that diet and exercise may not be sufficient in treating this population. It is equally important to examine the psychological components that are connected to weight gain.

For AA women, healthcare professionals, and society in general to understand the psychological components of obesity for AA women, there must be a clearer understanding of the ways in which the cultural constructs of emotional strength impacts weight gain for this population (Beauboeuf-Lafontant, 2007; Bell, 2004; Gourdine, 2009; Hamilton-Mason et al., 2009; Jones et al., 2007; Lefkowitz & Zeldow, 2010; Woods-

Giscombe, 2010; Woods-Giscombe & Black, 2010). In this study, I will examine the ways in which the AA female's weight-related health factors have been affected by the cultural expectation to remain emotionally and psychologically strong.

The goal of this literature review was to evaluate how the cultural expectation of strength affected the weight-related-health factors of AA women. I examined eight themes associated with obese and overweight AA women. The themes included (a) AA culture, microaggressions, and obesity; (b) cultural expectations of strength and other myths about the AA woman; (c) the cultural role of the AA mother; (d) ethnicity and health; (e) psychological and physical conditions that resulted from unmanaged stress; (f) body image and the acceptance of a larger body type; (g) weight loss, diet, and exercise; and (h) disordered eating.

I also explored the myths associated with AA women with regards to their ability to withstand stress and how this stress cycle affected depression. Included in this review is an examination of the negative long-term psychological and physical ailments that occur when AA women accepted and attempted to live up to the cultural expectation of remaining emotionally strong. I explored the theory of womanism (Abdullah, 2012; Boisnier, 2003; Collins, 2001; Hudson-Weems, 2001; Karenga & Tembo, 2012; Miguda, 2010; Smith, 2008; Tsuruta, 2012; Walker, 1967; Winkle-Wagner, 2008), as it provided the theoretical foundation of this study.

Literature Search Strategy

I researched the literature in the Walden University Library databases. The following search engines were used: BioMed Central, EBSCO host, Google Scholar,

ProQuest, PsyARTICLES, Sage Publication, and Thoreau: Search Multiple Databases. The following web sites were also explored: The Center for Disease Control and Prevention, The National Institute of Health, The World Health Organization, and the U.S. Department of Health and Human Services Office of Minority Health. The terms used to search the literature and websites were as follows *Black females, obesity, obese, overweight, African American, women, disordered eating, emotional strength, strong Black woman, diet, exercise, womanism, coping, stress, diabetes, health-related factors of obesity, family function, mother, body image,* and *statistics for rates of obesity in the United States.* Peer-reviewed research literature from 1999 to 2013 on the topics of AA females, body image, obesity, weight-related diseases, treatments focused on weight reduction, and womanism were examined. Due to limited research exploring the topics of womanism or the SBW cultural construct, peer-reviewed research conducted from 1999 to 2013 was used to provide a more in-depth review and detailed understanding of the topics being explored than would be possible with a focus on current research. Reviews of qualitative, quantitative, mixed method research, as well as the examination of national statistics were utilized in order to determine how AA women and obesity had been previously studied. One dissertation was examined to provide additional insight into the understudied area of the cultural expectation of strength for AA women. Walker (1967) was also reviewed to understand how the term and concept of womanism emerged.

Theoretical Foundation

The theory of womanism (Walker, 1967) provides insight into how the cultural expectation of strength impacts the behavior of AA women. Additionally, this theory

provides a unique perspective because the underpinning is based on understanding and valuing AA women (Abdullah, 2012; Boisnier, 2003; Collins, 2001; Hudson-Weems, 2001; Miguda, 2010; Smith, 2008; Walker, 1967). Other beneficial aspects of this theory have been expounded by proponents of womanism. These scholars have supported the notion that one must take into account the interactions of the both the cultural and noncultural roles that are held by AA women (Abdullah, 2012; Karenga & Tembo, 2012; Tsuruta, 2012; Winkle-Wagner, 2008). The use of this theory further adds to the understanding of AA women by offering a platform that can be used to investigate the long-term effects that specific cultural expectations have on AA women (Abdullah, 2012; Beauboeuf-Lafontant, 2005; Williams, 2005).

The term womanism was first introduced by Walker (1967). Walker implied that womanism was an alternative to, as well as an expansion of, feminism. Whereas feminism was concerned with the rights of women (Blue & Berkel, 2010; Boisnier, 2003; Joseph, 2009; Winkle-Wagner, 2008), womanism brings forth and supports the idea that women have the right to prosper in any of the roles they choose (Abdullah, 2012; Beauboeuf-Lafontant, 2005; Boisnier, 2003; Collins, 2001; Hudson-Weems, 2001; Miguda, 2010; Smith, 2008; Walker, 1967; Williams, 2005). The notion that a woman should be supported in any role she chooses, be it gender-conforming or nonconforming, is the fundamental difference between feminism and womanism.

The underlying premise of feminism was that women needed to be liberated from traditional or stereotypical roles (Collins, 2001; Tsuruta, 2012; Winkle-Wagner, 2008). However, Walker (1967) used her voice to offer an alternative to feminism that was more

in line with the AA experience than feminism was. She accomplished this end by providing two conflicting meanings for the term womanism. In the first meaning, Walker linked womanism to the AA female's history of oppression, which was based on gender and race. In the second meaning, Walker elevated AA women above EA women specifically due to the oppression AA women experienced. Walker implied that the oppressive experiences AA women faced prevented them from developing the perceived care-free attitudes held by EA women (Collins, 2001). According to the womanist theory, the AA women' experiences with marriage, childrearing, working, and cultural obligations were reported to be unlike those experienced by EA women (Abdullah, 2012; Smith, 2008). Overall, the theory of womanism was developed by Walker as a means of offering an alternative theory that was intended to be unique and focused specifically on AA women. This theory was introduced by Walker out of a growing need to understand how AA women's life experiences were intrinsically different from those of women from other cultural groups (Walker, 1967). This theory provides a unique perspective that involves valuing the impact AA women have in their communities and society as a whole.

By honoring the ways in which the historical experiences of AA women contributed to the cultural expectation of strength, the theory of womanism provided a path for understanding AA women on multiple levels. Supporters of womanism theorize that the construct of emotional strength are rooted in the ways that AA women have historically learned to survive both cultural and societal oppressions (Bell, 2004; Gourdine, 2009; Hamilton-Mason et al., 2009; Jones et al., 2007). In regards to this

research project, womanism is an applicable theory because it provides a framework for understanding the AA female experience while recognizing factors such as racism, classism, and sexism (Walker, 1967). It was my goal to use the theory of womanism to provide readers with a richer understanding of how the cultural expectation of strength influences the ways AA women respond to stress.

Several researchers have taken Walker's (1967) contribution and applied the theory of womanism to a variety of cultural factors that affect AA women (Boisnier, 2003; Collins, 2001; Karenga & Tembo, 2012; Tsuruta, 2012). These studies support the idea that AA women have traditionally been depicted negatively when nonculturally specific theories are used. It is further emphasized that using a theory that is specific to the cultural issues of AA women could be beneficial in reducing this negative bias. Additionally, using a culturally and gender-sensitive theory, such as womanism, allows AA women to be seen with a degree of strength, determination, and perseverance that is not as evident with noncultural theories. The theory of womanism attempts to elevate the AA woman, which is evident in the definition of the term "womanish" examined by Walker (1967). To act in a "womanish" manner implied that a woman displayed strength, thoughtfulness, risk-taking behaviors, curiosity, intelligence, and active pursuit of her goals. Although this positive depiction of the AA woman is important, it is not the only benefit of womanism. For instance, other scholars have pointed out the benefits of using womanism because of the specific cultural focus, thus making it better suited for understanding AA women when compared to multicultural theories or feminism (Boisnier, 2003; Hudson-Weems, 2001; Karenga & Tembo, 2012; Tsuruta, 2012). It is

important to understand that the theory of womanism can be used to not only examine culture, but can be expanded to examine the day-to-day issues that AA women' experience (Beauboeuf-Lafontant, 2007; Bell, 2004; Hamilton-Mason et al., 2009; Littlefield, 2003; Woods-Giscombe, 2010).

The theory of womanism has also been applied in studies that focused on understanding how AA women manage stress (Littlefield, 2003), cope with daily stressors (Hamilton-Mason et al., 2009), and handle the cultural expectations of being emotionally strong (Beauboeuf-Lafontant, 2007; Bell, 2004; Hamilton-Mason et al., 2009; Woods-Giscombe, 2010). Littlefield (2003) explored gender-role identity and stress from a womanistic perspective. The findings from this study revealed that AA women often have higher levels of masculine and feminine traits when compared to EA women. Additionally, Lefkowitz and Peter (2013) found that high levels of both masculine and feminine traits were associated with higher levels of mental health in women. These findings are important because AA women, who have historically been depicted in a negative manner because they display higher levels of masculine traits when compared to EA women, can understand that these traits can be assets to their mental health. Because AA women are said to portray more masculine traits the EA women, it is important to consider the cultural factors that are occurring. AA women are culturally driven to display stereotypical masculine traits, such as being emotionally strong, making financial contributions to their family, as well as having stereotypical feminine traits, such as nurturing children and being in charge of the home (Abdullah, 2012). It could be said that the need to possess both masculine and famine traits can be traced back to

slavery when AA women had to work in the fields and maintain their homes at the same time. The Littlefield (2003) study showed that this combination of feminine and masculine traits is beneficial. The AA women in Littlefield's (2003) study who had high levels of both masculine and feminine traits also had the best emotional health. It should be noted that both Littlefield and Lefkowitz and Peter (2013) reported that when there is a disturbance in the balance of masculine and feminine traits, psychological distress increased. When examining psychological well-being, it is important to note that gender roles often differ across cultures (Settles et al., 2010; Smith & Silva, 2011; Syed et al., 2013; Yoon, 2011). Investigating the differences in gender roles based on culture is another aspect that makes womanism a preferred theory when compared to feminism, for the AA woman.

Researchers who use the theory of womanism found it to be effective when investigating AA women and issues such as race, gender, and socioeconomic status (SES; Abdullah, 2012; Boisnier, 2003; Collins, 2001; Hamilton-Mason et al., 2009; Hudson-Weems, 2001; Karenga, 2012; Miguda, 2010; Tsuruta, 2012; Winkle-Wagner, 2008). Womanists theorize that AA women have historically been encouraged to persevere, overcome obstacles, survive hardships, and avoid displaying signs of perceived emotional weakness, such as crying or asking for help. Researchers have shown support for the theory of womanism because of the principles that promote an understanding of the cultural experiences of AA women (Abdullah, 2012; Boisnier, 2003; Collins, 2001; Hamilton-Mason et al., 2009; Hudson-Weems, 2001; Karenga, 2012; Miguda, 2010; Tsuruta, 2012; Winkle-Wagner, 2008). In the theory of womanism, it has been

hypothesized that AA women need to appear emotionally strong as a means to resist all forms of oppression (Tsuruta, 2012). When womanism is used to understand the experiences of AA women the culture, history, spiritual factors, relationships and social groups and are taken into consideration (Bell, 2004; Hudsin-Weems, 2001). By using the theory of womanism, researchers are able to attend to the cultural expectation of strength while investigating how factors like sisterhood and faith-based approaches facilitate wellness for this population (Woods-Giscombe, 2010).

Researchers have examined the benefits experienced by AA women who adhere to the tenets of womanism (Abdullah, 2012; Boisnier, 2003; Collins, 2001; Hamilton-Mason et al., 2009; Hudson-Weems, 2001; Karenga, 2012; Miguda, 2010; Tsuruta, 2012; Winkle-Wagner, 2008). It has been said that these AA women are able to explore all aspects of their lives in a positive way instead of using a problem-focused approach found in feminist theory (Gourdine, 2009). Womanist theory captures many facets of what it means to be an AA woman in our current society (Jones et al., 2007). Womanism is used by researchers to support AA women in a way that helps those who are experiencing distress regain confidence, power, and the desire to move forward (Gourdine, 2009; Hamiliton-Mason et al., 2009; Jones et al., 2007; Smith, 2008). Several researchers stated another benefit of using womanism is that culturally relevant traits of the AA woman are explored (Hamiliton-Mason et al., 2009; Jones et al., 2007). Furthermore, the theory of womanism can be used as a way for AA women to view themselves as successful instead of failures (Abdullah, 2012; Boisnier, 2003; Collins, 2001; Hudson-Weems, 2001; Jones et al., 2007; Miguda, 2010; Smith, 2008; Walker,

1967). When other theories, such as feminism, are applied to the AA female experience, it is often thought that cultural factors, such as emotional strength, are not valid components of well-being, psychological stability, or physical health (Gourdine, 2009).

Emotional Strength

A construct central to womanism is the idea of emotional strength. It is understood that emotions are experienced by all people, but the expression of emotions is influenced by cultural expectations. For example, Eastern cultures place a stronger emphasis on being more reserved in regards to displays of emotions, whereas Western cultures place a greater emphasis on self-expression and discussing emotions (Davis et al., 2012). Cultural norms for emotional expression can be based on characteristics such as gender, age, one's role in the family, and/or socioeconomic status. In the AA culture, the construct of the SBW often sets the precedence for how the AA woman should show emotion and respond to stressful life situations. For clarity, in regards to the SBW, emotional strength has been defined as a belief that one must remain mentally and emotionally strong in all situations (Beauboeuf-Lafontant, 2005). Although we know that all people experience emotions, there is a dearth of information regarding the consequences to AA women when they accept the social construct of the SBW (Beauboeuf-Lafontant, 2007; Bell, 2004; Hamilton-Mason et al., 2009; Woods-Giscombe, 2010). On one hand, it has been argued that being emotionally strong is a positive trait and provides benefits that promote resiliency (Clare et al., 2014). Yet, at the same time, it has been suggested that negative traits have also been associated with those who identify themselves as strong Black women (Beauboeuf-Lafontant, 2007; Woods-

Giscombe, 2010). Examining the SBW construct through a cultural lens shows that when AA women are labeled as a SBW, they are assigned a role that does not allow them to request or need emotional support (Beauboeuf-Lafontant, 2005; Woods-Giscombe, 2010). Additionally, researchers have shown that accepting the title of a SBW increases reports of stress for some AA women (Woods-Giscombe, 2010). In essence, a SBW is characterized as one who is selfless, has higher levels of resiliency than others, is fulfilled in her life, is always loving and supportive, is a respectable person, is serious, never complains, does whatever needs to be done, is a survivor, is a laborer, and is a tireless worker (Beauboeuf-Lafontant, 2005; Bell, 2004; Hamilton-Mason et al., 2009; Woods-Giscombe, 2010).

Conceptual Framework

The persona of the SBW was assigned to the AA women during slavery (Hill, 2009). During slavery, the AA woman was expected to portray both masculine and feminine traits (Bell, 2004). It was common practice for AA women to work in the fields, doing the same tasks as men (Bell, 2004), all while breastfeeding and caring for their children. It should also be noted that the AA female slaves were expected to endure physical, psychological, and emotional traumas such as being raped, watching their family being sold, having their children taken away, and being beaten at the discretion of the slave-owners. Despite the various forms of abuse, AA female slaves were expected to endure these acts without showing outward signs of emotions. Displaying emotional strength was a means of protecting and caring for oneself as well as one's family and home. Being stoic soon evolved into a badge of honor for many slaves. This honor was

bestowed on the female slave every time she was praised for being strong in the face of her adversities. Being called a SBW meant that AA women did not succumb to the pressures that were associated with various forms of oppression (Beauboeuf-Lafontant, 2005, 2007; Bell, 2004; Woods-Giscombe, 2010; Woods-Giscombe & Black, 2010).

Nearly 200 years later, AA women continue to carry the title of the SBW. However, minimal research has been completed which investigates the physical or mental consequence of accepting the role of SBW (Beauboeuf-Lafontant, 2005, 2007; Hamilton-Mason et al., 2009). What is known is that statistically AA women have the highest rates of obesity and weight-related diseases such as heart disease, stroke, and DM (Flegal et al., 2012; Ogden et al., 2010; U.S. Department of Health and Human Services Centers for Disease Control and Prevention, 2010). Yet, it is not known if any of the weight-related health factors are a consequence of accepting the role of a SBW.

While several researchers have investigated the epidemic of obesity, weight loss, and body image for AA women (Barnes et al., 2007; Capers et al., 2011; Clark, Taylor, Wu, & Smith, 2013; Fitzgibbon et al., 2012; Reel et al., 2008; Vines et al., 2007; White, Bursac, & West, 2011), no peer-reviewed journal articles could be found where researchers investigated if the cultural expectation of emotional strength impacted the weight-related health factors of AA women. Additionally, no research could be located that investigated obesity and AA women using a cultural theory, such as womanism. It is my intention to examine weight-related health factors as it relates to AA women using the theory of womanism.

Walker's (1967) theory of womanism examines a variety of aspects regarding the way AA women understand, and function in their relationships with self and others. The theory of womanism is used to promote the notion that women are capable of having sexual and nonsexual relationships with both males and women. Furthermore, womanists recognize that women can be dedicated to uplifting both males and women. Additionally, by using the theory of womanism it is accepted that AA women do not see themselves as separate from those around them, and that they work towards the survival and wholeness of the group. With that said, there is an understanding that AA women appreciate, and prefer a female-centered culture, they also value the strength women possess, and support the ways in which women can show emotion including laughter and tears (Walker, 1976).

The purpose of this study is to add to the body of literature by using the theory of womanism to explore the ways AA women experience the cultural constructs of emotional strength and the SBW persona. Moreover, this research will examine how both constructs impact the weight-related health factors for AA women. I found the theory of womanism to be useful as the theoretical foundation because the experiences, past and present, faced by AA women are important tenets of the theory. Additionally, the ability to take a retrospective approach helps provide a foundation for understanding how emotional strength can be important for AA women. Furthermore, Walker's (1967) theory allows researchers to investigate emotional strength, the SBW persona, and the culturally accepted methods that AA women use to manage stress. The research questions of this study build upon the existing theory of womanism by examining to what degree

the construct of emotional strength impacts the eating habits and weight-related health factors of AA women.

The Obesity Epidemic Among AA Women

The rates of obesity, based on BMI, for AA women suggest a need to investigate if there is a specific cultural link to obesity for this group. The rates of obesity have reached epidemic proportions, with more than one-third of adults (35.7%) in the United States being classified as obese (Ogden et al., 2010). Furthermore, AA women continue to far exceed the rates of obesity when compared to any other cultural group in the United States (Flegal et al., 2012; Ogden et al., 2010; U.S. Department of Health and Human Services CDC, 2010).

Both the Centers for Disease Control and Prevention (CDC; Ogden et al., 2010) and with the World Health Organization (WHO; World Health Organization, 2013) use the BMI calculation to define weight categories. A person's "BMI is calculated as weight in kilograms divided by height in meters squared rounded to one decimal place" (Ogden et al., 2010 p. 6). A BMI of greater than or equal to 30% is classified as obese, a BMI of greater than or equal to 25% is considered overweight, and a BMI between 18.5% and 24.9% is considered a normal weight (Wilmore, 2007).

When the obesity rates are investigated based upon cultural groups, non-Hispanic Blacks have the highest age-adjusted rates of obesity (49.5%) when compared with Mexican Americans (40.4%), all Hispanics (39.1%), and non-Hispanics Whites (34.3%) (Flegal et al., 2012). Statistically, four out of five AA women are overweight or obese

and are 70% more likely to be obese than non-Hispanic European Americans (US Department of Health and Human Services Office of Minority Health, 2012).

Traditional Explanations for Obesity Among AA Women

Racial Discrimination and Health

Several explanations have been offered for the high rates of obesity among AA women. Racial and ethnic discrimination is another stressor that affects physical health outcomes of racial minority group members. Kaholokula et al. (2012) studied the link between perceived racism and physiological stress. Kaholokula et al. noted that the link between racism and physical health among native United States populations has not been studied, even though there are high rates of discrimination and stress-related disorders among this group. Kaholokula et al. specifically studied these factors in 146 adult Native Hawaiians. The relationships between perceived racism, and two indices of physiological stress, cortisol level and blood pressure, were examined. A questionnaire was used to assess cortisol level, blood pressure, and felt racism. Qualitative measures of general psychological stress and ethnic identity were collected. Quantitative measures were also used, including salivary cortisol samples, height, weight, blood pressure, age, sex, ethnicity, BMI, marital status, and education level. The research findings were that attributed racism was linked to lower average cortisol levels, after adjusting for sociodemographic, biological, and psychosocial factors. Felt-racism was significantly linked to higher systolic blood pressure, but not true after adjusting for the sociodemographic, biological, and psychosocial confounding variables. Racism was

found to be a chronic stressor that influenced physical health and risk for stress-related diseases, which was possibly due to cortisol dysregulation mechanisms.

Otiniano and Gee (2012) also reported on the impact of discrimination on health-related qualities of life. The populations studied included AA (*n* = 4,343), Central American (*n* = 1,504), Mexican (*n* = 12,336), EA (*n* = 52,571), and other Latino (*n* = 1,828) groups. Data were from the 2003 and 2005 California Health Interview survey. Findings from regression analyses were that discrimination was reported by 57% of AA, 24 to 31% of the Latino, and 10% of EA participants. Discrimination was related to increased numbers of unhealthy and disability days, as well as poor self-rated health. However, these relationships did not vary consistently by race/ethnicity. Thus, regardless of ethnicity/race, racial discrimination was a potential risk factor resulting in a poor health-related quality of life.

Likewise, Gee, Walsemann, and Brondolo (2012) reviewed the literature on racism as it is related to health inequities from a life-course perspective. These authors noted that although studies confirm this relationship, more information is needed. These authors reported that as a person ages, he or she is likely to experience new types and levels of racial bias, related stress, and health outcomes.

Gee et al. (2012) noted that one stressor can lead to other stressors, such as when the stress of losing a job leads to the stress of financial strain and illness. Discrimination can lead to multiple stressors and related illnesses; the illnesses can, in turn, result in additional stress and discrimination. Self-reported racial discrimination is related to health problems, and these can lead to depression, which can result in other problems

such as poor parenting practices and related stress. Lifetime exposure to discrimination was found to be related to perceptions of social interactions as being unfair or harassing and has led to stress and related health outcomes. Gee et al. concluded that the study of racism and health inequities must include consideration of multiple factors across the lifespan.

Kaholokula et al. (2012), Otiniano and Gee (2012), and Gee et al. (2012) all provided additional research to the support the conclusion that ethnicity, stress, and health are related factors, and that one stressor can lead to another. These researchers also supported the premise of this paper that the stress experienced by the AA woman, due to ethnicity and other life factors, has the potential to lead to negative health outcomes.

Neighborhood Influences

Understanding obesity among AA women also involves examining the roles of neighborhood and other social factors that differ across racial groups. The neighborhood and social environment where a person is raised has also been shown to affect the rates of obesity. For example, Nicholson and Browning (2012) explored racial and ethnic neighborhood issues related to obesity as individual's transition into adulthood. Nicholson and Browning pointed out four neighborhood disadvantages that influenced individual experiences which in turn led to racial and ethnic disparities in obesity. The neighborhood disadvantages were measured using rates of families receiving public assistance, woman-headed homes with no husband present, families living below the poverty level, and unemployment. To explore this issue, Nicholson and Browning used data from Waves I and III of The National Longitudinal Study of Adolescent Health (Add

Health, 2012). This study included a nationally representative sample of 5,759 adolescents, of whom 54% were female, 63% were EA, 21% were AA, and 16% were Hispanic. Controlling for prior obesity status, findings were that for women, neighborhood disadvantage explained in part the racial/ethnic differences found in young adult obesity with neighborhood disadvantage increasing the likelihood of becoming obese was significant in women but not in men. Although family and female roles were not discussed specifically, the researchers illustrated that neighborhood disadvantage, combined with social inequalities, and isolation play an important role in health differences in disadvantaged groups.

In contrast, Saunders, Kalycia, and Hyo (2012) also explored social factors found in childhood and adulthood that are related to adult obesity in AA and EA women and came to different conclusions. They reported that childhood obesity was the leading factor in adult obesity for women. Saunders et al. found that few researchers have explored the impact of individual and neighborhood poverty on the likelihood of adult obesity. Saunders et al. used a longitudinal cohort study with children born in Baltimore, MD, United States, and followed them until they were adults from ages 27 to 33 years. Findings from a logistic regression analysis derived from the 986 female respondents, of whom 82% were AA and 18% were EA, showed that both racial groups had similar rates of poverty and adulthood obesity. Childhood risk for obesity and being overweight were both related to an increased likelihood of adult obesity. It was concluded that childhood obesity was the stronger predictor of adult obesity in this study. Additionally, these researchers found that the AA women participants had an overall lower household

income but similar education as the EA women in this study. This income difference resulted in the AA women living in lower income neighborhoods that are predominantly AA. This study provides insight and suggest that racial segregation and social disadvantages negatively impact health.

Both Nicholson and Browning (2012) and Saunders et al. (2012) explored the impact of neighborhood hardships and despite the fact that prior obesity was the strongest contributor to adult obesity, neighborhood disadvantage played an important role in adult obesity with AA women having an overall social economic status when compared to other women in the study. This type of economic stress negatively impacts the health of AA women. Neighborhood disadvantages provide a stressor that disproportionally affects AA women's development of obesity.

Body Image and the Acceptance of a Larger Body Type

Saguy (2012) reported that being overweight is a feminist issue that requires further study. Using the literature to support conclusions, Saguy reported that being overweight or obese is a feminist issue since it is viewed as a symptom of underlying distress. Obesity may result from compulsive eating as a way to cope with stress. Higher obesity rates among poor women and/or women of color is viewed by some as a form of environmental injustice requiring new policies to combat obesity in this population. As a feminist issue, being overweight is linked to the fear of being or becoming obese, which can lead to disordered eating. Being obese can also be seen as a feminist issue because obese women are more prone to encounter bias, discrimination, and emotional discomfort from the rejection they experience as a result of their weight. As a result of the negative

life experiences associated with being overweight, an all-inclusive approach to research is needed. Research examining factors of sex, race/ethnicity, social class, and sexual orientation when examining weight-related issues is needed to fully understand the impact of these issues on women. Although limited, the findings by Saguy (2012) supported the need to research the topic of obesity and related factors in minority women from a perspective that accounts for issues that are unique to this group.

Fitzsimmons-Craft and Bardone-Cone (2012) investigated factors of body surveillance, trait anxiety, and body dissatisfaction in AA and EA college women. As noted by these authors, the female body is objectified in the U.S. culture. This objectification has conditioned women to view their bodies as objects. It is suggested that women form opinions about their bodies based on what others think of them. Fitzsimmons-Craft and Bardone-Cone asserted that women in the United States are likely to view their body from an observer's perspective. This process of viewing oneself as an object is referred to as self-objectification. Self-objectification has been found to be a cause of body dissatisfaction (Fitzsimmons-Craft & Bardone-Cone, 2012). The correlations and consequences of self-objectification for AA individuals are not understood because self-objectification may vary considerably across racial/ethnic groups.

To investigate how self-objectification affects AA and EA populations, Fitzsimmons-Craft and Bardone-Cone (2012) conducted a study to explore body dissatisfaction with these cultural groups. Two models were studied. In the first, trait anxiety was explored as a mediator of the relationship between body surveillance, the

behavioral indicator of self-objectification, and body dissatisfaction. In the second model, body surveillance was explored as a mediator of the relationship between trait anxiety and body dissatisfaction. The study participants included 276 undergraduate women for the first, of which 97 (35%) were AA, and 179 were EA non-Hispanic. The second model included 226 participants, of which 70 were AA women and 156 were EA women. The two studies took place 5 months apart. Questionnaire findings were that the first mediation model was not significant, and the second model was significant for the EA women only. Fitzsimmons-Craft and Bardone-Cone concluded that the differential effects of self-objectification on women's body dissatisfaction vary depending on race/ethnicity with EA women experiencing more body dissatisfaction and body surveillance than AA women. While the EA women's level of body dissatisfaction is tied to an ideal of being thin AA women are more likely to express body dissatisfaction when their health is at risk for being negatively impacted. Fitzsimmons-Craft and Bardone-Cone also suggested that AA women who expressed more body dissatisfaction are more likely to be immersed in a EA setting, such as attending a predominantly EA college. These findings are important to understand when studying obesity within the AA female population and it may be argued that being thin is not as much of a factor as being healthy is in the body dissatisfaction or to related mental and physical health outcomes for AA women.

SBW Persona as a Factor in Obesity among AA Women

In addition to the factors traditionally considered as contributors to obesity among AA women, the SBW persona may be a contributor. Many of the traits that are associated with being a SBW have been associated with increased stress levels, ineffective coping,

and exhaustion (Hamilton-Mason et al., 2009). It has also been suggested that women who experience continuous strain and negative emotion may also be using ineffective coping such as overeating. As discussed later in this review, overeating has been said to be an attempt to handle the pressures that are associated with ongoing stress (Piquero, Fox, Piquero, Capowich, & Mazerolle, 2010). Although various forms of oppression such as racism, classism, and sexism are experienced by women across cultures, both within and outside of their cultural groups, the mandate of emotional strength is a cultural construct that is unique to AA women as evident by the persona of the SBW (Bell, 2004; Hill, 2009; Torres et al., 2010).

Roots of Cultural Expectations of Strength and Other Myths About the AA Woman

Since slavery, AA women have been expected to be emotionally stronger and more resilient than other cultural groups (Bell, 2004). From the beginning of slavery to the present day, AA women continue to accept or acknowledge the cultural expectation of being emotionally strong (Beauboeuf-Lafontant, 2005, 2007; Bell, 2004; Woods-Giscombe, 2010; Woods-Giscombe & Black, 2010). Out of necessity, AA women have learned to protect themselves and defend their rights against those who attempt to abuse, manipulate, and disregard their basic rights (Bell, 2004). The acts of self-preservation, demonstrated by AA women, have at times been mistaken for aggression. Acting in an aggressive manner is another myth that is associated with AA women (Bell, 2004). As a group, AA women have been classified as independent, assertive, and strong-willed, caretakers, selfless, and emotionless. The myths that are associated with AA women can

be observed in the ways in which AA women are depicted by the media (Black & Peacock, 2011; Carpenter, 2012).

Combined, the traits, myths, and media images of AA women have become a conglomerate of qualities that embody the SBW. Essentially the SBW may say to herself, "I can do everything by myself," "I'm fine," and "don't worry about me." The SBW welcomes being seen as a person who can "tolerate the intolerable" (Beauboeuf-Lafontant, 2005 p. 106). In the AA community, the qualities of the SBW are praised due to a cultural understanding that *only the strong survive*. AA women who pride themselves on being emotionally strong and those who accept the title of the SBW are often rewarded. These women can be found in official and unofficial positions of leadership in their churches, homes, and work places. Strong Black women are known for their ability to set rules for their families and handle any issues that arise without faltering. More importantly, AA women who take on the role of the SBW will not ask for help, as doing so is a sign of weakness (Beauboeuf-Lafontant, 2005, 2007; Bell, 2004; Woods-Giscombe, 2010; Woods-Giscombe & Black, 2010). This refusal to ask for help only feeds into the notion that a SBW does not need anything from anyone. Webb (2011) reported that the myth of the SBW has influenced AA women since the 19th century. Webb proclaimed that the SBW role puts additional demands on the AA woman because it requires both an emotional and physical strength that goes outside the scope of what most people could handle.

The SBW Label as Microaggression

As discussed previously, weight differences between cultural groups might be due to the social inequalities experienced by each group. Researchers who have investigated AA women, culture, and obesity found more evidence of this type of effect when they focused on macroaggressions, such as overt discrimination, racism, sexism, classism, and socioeconomic status (SES; Donovan, Galban, Grace, Bennett, & Felicie, 2013). Although researchers have focused on the larger cultural and societal issues related to obesity, minimal attention has been given to the microaggressions experienced by AA women and how this impacts the obesity rates. Microaggressions are subtle, commonplace, and often unconscious acts of discrimination. These acts can be verbal, non-verbal, or behavioral. Microaggressions communicate hostile, derogatory, or negative racial slights or insults (Donovan et al., 2013; Sue et al., 2007). Some examples of microaggressions are asking a person of non EA ethnicity where they are from, asking a person of a different ethnicity what other language they speak, showing surprise when an AA male does not participate in sports, or telling an AA person that they do not act or speak "Black". All of these examples imply to the receiver of the message that they are not as valued, they do not belong, or they are only valuable if they engage in certain activities. AA individuals experience more macroaggressions and microaggressions than the EA population (Capers et al., 2011; Kumanyika et al., 2007; Torres et al., 2010).

Additionally, microaggressions send subtle messages telling people that they belong to a racial minority group. More specifically, microinvalidations are forms of microaggressions that are expressed as comments or acts towards minority group

members (Donovan et al., 2013; Torres, Driscoll, & Burrow, 2010). Furthermore, microinvalidations negate the thoughts, feelings, or experiences of an ethnic group (Mercer et al., 2011). Some examples of microinvalidations are to assume that all AAs were raised in poverty or that all Asians have an aptitude for mathematics. These comments or acts can be well-meaning, or not intended to harm; yet, these comments or acts send denigrating messages that tells the receiver that their thoughts, feelings, or experiences are not valid (Donovan et al., 2013; Torres et al., 2010).

It is possible that these types of messages are reinforced when AA women are given the title of SBW. To the receiver, these microinvalidations send subtle messages telling the receiver they should not complain or request help. To date, there is a lack of literature investigating the impact that the microinvalidation of being labeled a SBW has on the emotional or physical health of AA women. It is important to understand that even well-meaning titles, such as the SBW, can act as a cultural barrier for women, making it difficult for these women to ask for help or attend to their own needs. The impact of this label has not been specifically researched, but the statistics regarding the health of AA women suggests that this area warrants exploration.

The Role of the AA Mother

The values of strength and resiliency are also found in the role of the AA mother (Fouquier, 2011). According to the SBW cultural construct, an AA woman is expected to be a selfless mother, to participate in physical work, to make financial contributions to the family, and to remain a loyal companion to one man (Beauboeuf-Lafontant, 2007, 2008; Bell, 2004; Harrington, Crowther, & Shipherd, 2010; Reynolds-Dobbs, Thomas, &

Harrison, 2008). According to Webb (2011), the SBW is to work without rest until her body is worn out. From the concept of a SBW, the AA mother needs a big strong body to keep up with these demands and to survive harsh conditions that date back to slavery. A larger-sized body represents a safe, warm, and secure place for others to find comfort, this includes her mate, her children, and historically even the slave owner. This body size replaces the need for emotions and other humanness because size is often equated to one's degree of strength. This concept of strength may provide another explanation as to why the AA mother is less likely to ask for help than other women are.

The AA woman takes her attributes of strength and resiliency and passes them onto her family. In an earlier study, Black (2003) explored the roles of the AA mothers and AA families. AA family values include those of strength and resiliency in the face of hardship (Black, 2003). These families are expected to remain strong regardless of what they encounter. Black specifically investigated the impact of personal resources, stress, and social support on the psychological functioning of these mothers. Some of the mothers lived alone, some lived with spouses or intimate partners, and others lived with grandmothers. The sample included 702 mothers who were from a study of 897 AA families from Wave 1 of the Family and Community Health Study that Black conducted. Anxiety and depression, to some degree, were present for all the AA mothers in this study (Black, 2003). Family composition affected these outcomes. Personal stressors were more predictive of depression in mothers who lived alone than for those who lived with a partner. Racism predicted anxiety in mothers who lived alone, but less so in mothers who lived with partners. Thus, the AA woman, although perhaps appearing

strong on the outside, experienced anxiety and depression on the inside (Black, 2003). Both Webb (2011) and Black pointed out the family values and mother roles of the AA woman. Webb used the literature to describe the ways AA women have historically been depicted and the impact this has on the perception of the AA woman. Black analyzed how anxiety and depression are impacted for the AA mother when another adult is in the home. Black found that having another adult in the home reduced rates of anxiety and depression for the AA mothers in the study (Webb, 2011).

Mitchell and Ronzio (2011) took an in-depth look at the levels of depression and anxiety for AA and EA mothers. They found that rates of depression and anxiety where highest for AA mothers when compared to EA mother in all 50 states. Their research showed that social stressors often result in negative coping responses which support the findings of the previously mentioned research conducted by Everett, Hall, and Hamilton-Mason, 2010. The use of negative coping styles puts AA women at higher risk for experiencing depression and anxiety (Mitchell & Ronzio, 2011). It should be noted that Mitchell and Ronzio found that having a strong ethnic identity can be an integral part of a person's self-concept and was also a mediating factor in reducing stress and anxiety. This research provides a link to understand that although accepting the SBW cultural identity may result in added psychological pressures for the AA it may also serve as an ethnic identity that is valued in the culture thus providing some level of psychological protection to cope with societal demands.

Coping Responses of AA Women

As previously mentioned researchers have suggested that the SBW identity is associated with poor coping responses. Everett et al. (2010) reported on the coping responses of AA women as they strive to deal with daily stress and conflict. These authors sought to determine the impacts of race, social class, and gender on daily stress and coping. They noted that coping effectively with stress is important to maintain optimal health and psychological well-being. The authors included a sample of 41 AA women from ages 18 to 55 years. The women participated in a 2-hour audiotaped focus group and completed a demographic questionnaire. The researchers concluded from their results that multiple stressors were experienced by all participants based upon time commitments and problems balancing family and work. Role-strain, racism and sexism in the workplace, and financial problems also added to the stress experienced by this AA female sample. They reported experiencing stress-related problems, such as hair falling out, anxiety and depression, and sleep deprivation (Everett et al., 2010).

The participants in this study reported using multiple coping methods, such as having social support networks, to reduce their levels of personal stress. Although some participants found that in avoiding certain situations was helpful, most agreed that making the self a priority was the most beneficial way to cope (Everett et al., 2010). Coping methods reported included going to the gym, going for a walk, praying, and talking to "my mother." These women reported that they tended not to admit that they needed help and that they generally did not ask for help. Although the sample size was small, it was representative of the population, and the research findings from this study

provided insight into both the stress experienced and the coping methods utilized by AA women. The findings underscore the idea that AA women are adversely affected by stress, but are resistant to asking for help when stressful situations arise. .

Disordered Eating as a Coping Mechanism

When people experience stress they use a range of techniques to help manage the internal and external demands they are facing. Some coping strategies are said to provide more psychological benefits than other. For instance, in times of stress some people may use active coping strategies such as ask other for assistance, delegating tasks, meditating, attending a support group, or start an exercise program. On the other hand, people who use negative coping strategies such as avoiding situations or using a substance, such as food, to make oneself feel better often have poorer psychological outcomes than individuals who use active coping strategies (Davies, Bekker, & Roosen, 2011).

Inzlicht and Kang (2010) researched the issue of coping and stereotype threats. Stereotype threats are threats that occur when an individual believes their behavior is being judged based on a stereotype and not on their personal merits. These researchers used a sample of 46 female college students and found that when the participants were put in a situation where they experienced stereotype threat in one situation they had a greater intake of fatty food in the second part of the study. These findings imply that coping with stereotype threats can leave an individual with less coping resources in other areas of their lives such as controlling one's food intake.

Harrington, Crowther, and Shipherd (2010) examined the impact of trauma exposure and binge eating rates in AA women who subscribe to the SBW identity. The

participants in this study were 179 female trauma survivors who ranged in age from 17 to 63. They found that these participants used food for emotional regulation. Furthermore, these researchers suggest that AA women who accept the SBW identity may use food as a culturally acceptable method of coping. Additionally, these findings support the idea that binge eating may be used as a coping strategy to managing negative affect.).

Flowers, Levesque, and Fischer (2012) explored the relationship between maladaptive eating behaviors and racial identity. The study included 85 AA women inform two small private colleges, one predominately White and one historically Black, in the southeastern region of the United States. Flowers et al. reported that past research findings demonstrate that EA women suffer more from eating disorders and body image dissatisfaction, compared to AA women. More recent meta-analyses findings demonstrate that these differences are decreasing and that some AA women are particularly susceptible to body dissatisfaction and eating disorder symptoms. The authors sought to understand this trend further (Flowers et al., 2012).

From the use of self-report measures to assess age, body image, eating behaviors, and racial identity, Flowers et al., (2012) concluded that self-hatred based on AA group membership and body dissatisfaction were linked to negative psychological outcomes and maladaptive eating behaviors. Body dissatisfaction and self-hatred based on AA group were factors in body dissatisfaction, binge eating, and purging (Flowers et al., 2012). Disordered eating became a method of coping with self-hatred and body dissatisfaction. This study was limited by the cross-sectional sample, but did provide

insights into the types of stress that might lead to eating disorders and related physical problems.

Talleyrand (2012) also explored disordered eating in women of color. This author reported that there is a lack of research regarding eating disorder symptoms in racially and ethnically diverse groups even though rates of disordered eating are similar across races. Talleyrand presented findings from a review of the literature that was related to eating disorders in women of color. Talleyrand focused on how stressors contributed to disordered eating across all ethnic groups.

Talleyrand (2012) pointed out literature findings that women of color may be going through a stressful acculturation process, which has the potential to lead to the development of eating disorders. When women feel ethnic cultural values and/or gender-role values conflict, the results can cause psychological stress. AA women are member of two oppressed groups (race and gender) and these women may feel powerless. To overcome this oppression, AA women have historically been socialized to appear to be strong, self-sufficient, and resilient in the face of any and all stressors. This need to appear strong can have negative health consequences such as an increased risk for eating disorders. Food binging or restriction may be used as a coping strategy to deal with feelings of powerlessness and a lack of control. Since studies show that body satisfaction levels tend to be higher for AA women, this implies that there is another reason for their food addictions, such as stress. While the study was limited to literature findings, which may represent researcher bias, Talleyrand presented the conclusion that the issue of disordered eating in AA women requires further study to allow counselors to be better

equipped to help this population. These findings support the need for the current study to explore the relationship between body mass index and using eating behaviors as a means to manage cultural stressors.

Summary and Conclusions

Literature findings support the conclusion that non-Hispanic Blacks have the highest age-adjusted rates of obesity (49.5%) (Flegal et al., 2012). Since the time of slavery in the United States, AA woman have been expected to be emotionally stronger and more resilient than other cultural groups (Bell, 2004; Black, 2003; Webb, 2011). These women face hardships that may contribute to weight gain (Nicholson & Browning, 2012; Saunders et al., 2012). This population is expected to remain strong in the face of diversity and tend not to ask for help with daily tasks. It remains unclear from the research whether this stance is a predictor of obesity (Nicholson & Browning, 2012; Saunders et al., 2012).

Literature findings also support the conclusion that ethnicity, stress, and health are related (Gee et al., 2012; Kaholokula et al., 2012; Otiniano & Gee, 2012). There is a link between depression, diet, exercise, and BMI (Ma et al., 2013; Olander et al., 2013; Roberts & Duong, 2013). The literature supports that the obese AA woman faces health-related consequences such as high blood pressure, DM, heart related diseases, stroke, a poorer quality of life, and decreased self-esteem (Jeffries, 2012). While these stressors may lead to ineffective coping behaviors, such as over eating which results in weight gain, more information is needed to confirm this hypothesis (Talleyrand, 2012).

It was concluded that a study was needed to explore the hypothesis that for AA women, weight-related health factors were connected to beliefs in the need to remain mentally and emotionally strong in all situations and refrain from asking for help. Additionally, it was concluded that a study was needed to explore the hypothesis that using food as a coping mechanism may be linked to weight gain in AA women who accept the persona of the SBW. Chapter 3 is an explanation of the methods and procedures that were used in this study to test these hypotheses.

Chapter 3: Research Method

The purpose of this study was to gain an understanding of how the cultural expectation of emotional strength and accepting the identity of the SBW contributed to weight gain and obesity for AA women. The information for this study was gathered by using an online survey. Potential participants were informed of the survey by a posting that was located on the BDO Facebook page, their website, and in their newsletter which was sent via e-mail. According to Ramo, Hall, and Prochaska (2011), it has been supported that online surveys are a valid and reliable tools for gathering information for research.

I used a cross-sectional survey design to assess the relationship between the dependent variable BMI and the three independent variables of perceived stress, willingness to ask for help, and emotional strength. The invitation to the survey was posted with the BDO. However, the link that was posted with BDO took participants to the survey that was posted with SurveyMonkey.com. Online surveys have shown to be valid and reliable tools for gathering research information (Ramo, Hall, and Prochaska, 2011). There are three distinctive features of cross-sectional research designs, which include no time dimension, a reliance on existing differences rather than change following intervention, and groups are selected based on existing differences rather than random allocation (Hall, 2008). The research questions aimed to determine if there was a significant linear relationship between the independent variables and the dependent variables. The correlational quantitative study design was the only design that could answer this question in a statistically significant manner (Field, 2012).

The participants were able to access the survey at any time during a specific time frame. Using an online survey removed many of the challenges associated with face-to-face interviews such as interviewer bias, the cost of travel, as well as coordinating times and dates to meet (Creswell, 2012). Cost control and stress management were other benefits of online surveys (Ramo et al., 2011). Allowing participants' to complete the survey when it is most convenient to them has been shown to be effective at reducing participant stress (Cantrell & Lupinacci, 2007; Ramo et al., 2011). Online surveys allow participants an added level of privacy. According to Ramo et al., (2011) participants share information more readily in an online survey format and are more truthful in their responses.

Online surveys provide an additional level of flexibility over other methods. The benefits of using online surveys are decreased cost, reaching more potential participants, increasing the ability for racial minority groups to participate, increased anonymity, convenience and ease of participation, and the ability for participants to complete the survey at their own pace (Cantrell & Lupinacci, 2007). With online surveys, participants' can access the surveys at any time during a specific time frame. For this research, the flexibility of using an online survey removed many of the challenges associated with face-to-face interviews such as, the cost of travel, and coordinating times and dates to meet. The use of online surveys has been supported specifically for those who are not able to meet at a specific location. Cost control, and stress management are other reported benefit of online surveys.

Many online surveys can be completed at minimal cost to a researcher. Participants would have an additional degree of flexibility with their time in completing the survey. For instance, allowing participates' to complete the survey over time or in one session could have been beneficial for the participants' who had time restrictions. Allowing participants' to complete the survey when it was most convenient to them has been shown to be effective at reducing participants' stress (Cantrell & Lupinacci, 2007; Ramo et al., 2011). Online surveys allow participants' an added level of privacy. Researchers have shown that participants shared information more readily and were more truthful in their responses when using an online survey format than when using a paper-and-pencil format (Ramo et al., 2011).

This chapter contains the three research questions, their associated null and alternative hypotheses, as well as a detailed description of the sample, including a power analysis. There is also a detailed description in this chapter of the SBWCCS (Thompson, 2003), the EES (Arnow et al. 1995), the PSS (Cohen et al., 1983), the GHSQ (Wilson, Deane, & Ciarrochi, 2005), and the BRFSS (Centers for Disease Control and Prevention, 2012). The three independent variables in this study were mental strength and emotional strength, willingness to ask for help, and using emotional eating as a means to manage perceived stress. BMI was the continuous dependent variable. High blood pressure, stroke, heart disease, and DM were dichotomous dependent variables. A convenience sample, from BDO, was used to recruit 127 AA female participants. The data collection procedures, and detailing of all statistical analysis procedures performed in the study, are also discussed here.

Research Questions and Hypotheses

RQ1. Is there a linear relationship between mental and emotional strength and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women?

$H1_0$: There is no linear relationship between mental and emotional strength and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women.

$H1_a$: There is a linear relationship between mental and emotional strength and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women.

RQ2. Is there a linear relationship between willingness to ask for help and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women?

$H2_0$: There is no linear relationship between willingness to ask for help and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women.

$H2_a$: There is a linear relationship between willingness to ask for help and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women.

RQ3. Are emotional eating and perceived stress predictors of weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women?

$H3_0$: Emotional eating and perceived stress are not predictors of weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women.

$H3_a$: Emotional eating and perceived stress are predictors of weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women.

Sample

The sample for this study consisted of AA women living in the United States. There are approximately 22.9 million AA women in the United States (Census, 2012). The adult population of AA women was the population to which this study will generalize.

A convenience sampling of 127 AA women was used to recruit participants to the study. Convenience sampling is a nonprobability sampling approach that does not attempt to identify a representative subset of the target population. It takes people or units that are readily available (Leedy & Ormrod, 2013). This sampling approach was chosen because it was more cost effective and time savings when compared to probability sampling approaches. Although convenience sampling can lead to overrepresentation or underrepresentation bias of your sample, this sampling approach was more manageable to carry out, requires minimal monetary cost, and minimal time resources to execute when compared to probability sampling approaches (Creswell, 2012).

G*Power (Erdfelder, Faul, & Buchner, 1996) was used to arrive at the minimum sample size for the linear regression. Erdfelder et al. stated the following:

> The GPOWER is a completely interactive program compatible with many personal computers that performs statistical power analyses for the most common statistical tests in behavioral research, including *t* tests, *F* tests, and χ 2 tests. GPOWER computes (1) power values for given sample sizes, effect sizes and α levels (post hoc power analyses); (2) sample sizes for given effect sizes, α levels, and power values (a priori power analyses); and (3) α and β values for given sample sizes, effect sizes, and β /α ratios (compromise power analyses). (p. 176)

Based upon the assumption that the linear regression will have no more than two predictor variables, a .15 effect size (medium effect), an alpha level of .05, power of .95 (95% chance of detecting a significant effect if one actually exists in the general population), the minimum sample size for this analysis is 107. The effect size and alpha levels are the standards for computing power analysis in social scientific research (Leedy & Ormrod, 2013). A sample of 127 respondents was adequate to detect a medium sized effect. The minimum age for all respondents was 18.

The sampling frame consisted of AA women who are members of the BDO web site. The demographic audience targeted by the BDO web site was AA consumers. This organizations focus is to address health issues as they relate to AA individuals. I used the BDO website because it was a good way to get a convenience sample. The BDO website frequently posts surveys. This could have meant that members of BDO may have been more familiar with, and willing to participate in, online surveys when compared to other websites that did not use surveys. Additionally, this organization encourages researchers to interact with their members.

The administrator of BDO was responsible for posting the link for the survey on the BDO web site, their electronic newsletter, and their Facebook page. Participants were recruited from the BDO web site, their daily electronic newsletter, and the BDO Facebook page. The message shown at the link included information about the purpose of the study and the anticipated length of time needed to complete the survey. It was also explained that the link would take the participant out of the BDO website, electronic newsletter, or Facebook page to surveymonkey.com where the electronic consent form could be signed. The participants were informed that the survey was available immediately after the consent form was signed.

Instrumentation

Three scales were used in this study, the SBWCCS, the EES, and the PSS. A description of each scale along with reliability information is provided below. All the questions associated with the dependent variables, including DM, stroke, high blood pressure, and heart related issues were obtained from the BRFSS (Centers for Disease Control and Prevention, 2013). The demographic questions for the survey were taken from the SBWCCS.

The BRFSS is an instrument used by the Centers for Disease Control and Prevention to assess health and health behaviors among residence in all states in the United States. There were eight health questions from the BRFSS that were used in this study. The specific questions that were used are as follows:

1. Have you EVER been told by a doctor, nurse, or other health professional that you have high blood pressure?

2. Are you currently taking medicine for your high blood pressure?
3. Have you EVER been told by a doctor, nurse or other health professional that your blood cholesterol is high?
4. Have you ever been told that you that you had a heart attack also called a myocardial infarction?
5. Have you ever been told that you had angina or coronary heart disease?
6. Have you ever been told that you had a stroke
7. Have you ever been told that you have diabetes?
8. Have you ever been told by a doctor or other health professional that you have pre-diabetes or borderline diabetes?

The answer choices for these questions will be 1= yes, 2 = no, 7 = don't know/ not sure, and 9 = refused. It is important to note that self-reported weight and height is said to be valid and relatively accurate way to measure BMI (Yoong, S.L., Carey, M.L., D'Este, C., & Sanson-Fisher, R.W., 2013).

I used the SBWCCS to measure SBW cultural attitudes. The SBWCCS measures three characteristics of a SBW. The three characteristics measured by this scale are self-reliance, affect regulation, and caretaking (Hamin, 2008; Thomas, Witherspoon, & Speight, 2004; Thompson, 2003). The SBWCCS measure is a revision of the SBWAS (Thomas, Witherspoon, & Speight, 2004). The revised scale consisted of 22 items (see Appendix).

To determine if the items on the new scale showed internal consistency with one another in the current sample, Cronbach's alpha was computed for the SBW total

scale. The internal consistency of this scale = .76, indicating adequate internal consistency. (Hamin, 2008)

The scale was scored by totaling all items on the scale. The scale used a 5-point Likert scale (ranging from *never*=1, *rarely*=2, *sometimes*=3, *and almost always*=5) to answer 22 items. The measure was comprised of three subscales: self-reliance with four items (e.g., "I am independent"), affect regulation with nine items (e.g., "I have difficulty showing my emotions"), and caretaking with five items (e.g., "I take on more responsibility than I can comfortably handle"). However, only the total scale was included in the analysis. Cronbach's alphas for the subscales of SBWCCS were .69 for caretaking, .75 for affect regulation, .62 for self-reliance, and .76 for the total scale. The sample for the reliability analysis consisted of 152 who self-identified as AA, Black Hispanic, Caribbean American, or Biracial. The sample had a wide range of incomes and education levels. The mean age was 36.7 (*SD*=11.78) with the sample being predominantly AA (94%) and single (60%).

The internal consistency of the caretaking scale was adequate; however, the reliability of the affect regulation and self-reliance were lower than the traditional accepted value of .70. Values below .70 can be expected when measuring psychological constructs because of the complexity of the constructs being measured (Field, 2012). To determine whether the items in the new scale showed internal consistency with one another in the current sample, Cronbach's alpha was computed for the SBWCCS total scale. The internal consistency of this scale was .76, indicating adequate internal consistency (Field, 2005).

Validity was assessed in this same study using Varimax Rotation factor analysis. The factor analysis supported the use of three subscales as separate scales, and explained 30 percent of the variance. Cronbach's alpha for the subscales were .75 for caretaker, .69 for affect regulation, and .62 for self-reliance. This implied that reliability of the affect regulation and self-reliance subscales were lower than the value of .7 that is traditionally accepted; however, Field pointed out that values below .7 can be expected when measuring complex psychological constructs (Field, 2012).

Arnow et al. (1995) developed the EES to evaluate eating behaviors in the context of negative emotions. The EES was designed as a check off form where the participant was asked to use a 5-point Likert scale to rate the extent the feeling listed on the form led them to have an urge to eat. Some of the emotions listed on the EES include resentful, discouraged, shaky, worn out, and inadequate. The EES consist of 25 items and three scales (see Appendix B). The three scales are eating as a reaction to anger and frustration, eating as a reaction to fear, and eating as a reaction to depression or depressed mood. A 5-point Likert scale was used to evaluate the urge to eat under these three negative emotions where 1 = *no desire to eat*, 2 = *a small desire to eat*, 3 = *a moderate desire to eat*, 4 = *a strong desire to eat*, and 5 = *an overwhelming desire to eat*. Sample items included discouraged and guilty for the anger factor, nervous and excited for the anxiety factor, and lonely and worn out for the depression factor. In this study, the entire scale was used, where high scores equal high levels of emotional eating and low score represent low levels of emotional eating.

In a study of 47 obese females who had been accepted into a treatment study for women who were binge eaters, the reported reliability using Cronbach's alpha was .81 for the overall scale, .72 for the depression subscale scale, and .78 for the anger and anxiety subscale (Arnow et al., 1995). In a second study among 51 obese females who had been accepted into a treatment study for binge eating and weight loss, the validity of the EES was evaluated. Construct validity was assessed by examining the relationship between EES and two related inventories, severity of binge eating (BES) and the 7-day recall of binge days survey. High scores on all instruments represented high binge eating. Results indicated that the relationships between EES, BES, and the 7-day recall of binge days was strong, with significant correlation coefficients ranging from .44 to .65 for the EES sub scales and BES and the 7-day recall of binge days.

The PSS, the third measure, is a global indicator of perceived stress. It consists of 14 items with a 5-point Likert scale. A sample question from the PSS is "In the last month, how often have you been upset because of something that happened expectantly?" Coefficient alpha reliability for the PSS was .84, .85, and .86 in each of the three samples. The samples consisted of sample I, 332 (121 male, 209 female, two with sex not specified) freshman college students at the University of Oregon. Sample II consisted of 114 participants (53 females, 60 males, 1 sex not specified). Sample III consisted of 27 males and 37 females who were participating in a smoking-cessation group (Cohen, Kamarck, & Mermelstein, 1983). To score this scale, positively worded items were reverse coded and then all items were summed (see Appendix G). High scores represent higher stress, while low scores represent lower stress.

The internal consistency of this scale, measured by Cronbach's alpha, was .80, indicating adequate internal consistency (Field, 2005).

In a study of 332 college freshman at the University of Oregon, reliability and validity of the PSS were tested. Results indicated that coefficient alpha reliability for the PSS was .84. To assess the construct validity of the PSS, it was correlated with Life-Event Scores, a survey that measures the number of stressful live events in one's life. Increase in Life-Event Scores should be associated with increases in PSS scores. Results indicated that there was a significant medium correlation between PSS and Life-Event Scores, ($r = .35$, $p < .01$).

Data Collection

The survey instrument was created in the Survey Monkey online survey tool. A link to the online survey tool was generated and provided to the administrators of BDO. The administrator of BDO was responsible for posting the link for the survey on the BDO web site, their electronic newsletter, and their Facebook page. Participants were recruited from the BDO web site, their daily electronic newsletter, and the BDO Facebook page. The message shown at the link included information about the purpose of the study and the anticipated length of time needed to complete the survey. It was also explained that the link would take the participant out of the BDO website, electronic newsletter, or Facebook page to Survey Monkey where the electronic consent form could be signed. The participants were informed that the survey was available immediately after the consent form was signed.

Once the person receives the message, they were instructed to click on the link to be taken to the survey. The introduction to the survey contained informed consent materials including their right to not participate, and a description of confidentiality and usages of the study. If the person chose to participate in the study, this constituted their agreement with the content of the informed consent. After the completion of the survey, the respondent was thanked for their participation and provided with an e-mail address in case they had any questions.

To avoid social desirability response set, participants were not be informed about the specific focus of the study (examining the relationship between weight-related health factors and cultural stress induced eating, willingness to ask for help, and emotional strength in AA women). Specifically, the respondents were told that the purpose of the study was to improve understanding of stress in AA women.

The data collection period began 10 days after the questionnaire and thesis proposal had been approved from the Walden University Institutional Review Board and remained open until the target sample of 127 respondents was reached. Once the data collection period ended, potential participants who visited the data collection website received a message thanking them for their interest in the study and indicating that the study was closed.

Data Analysis

The Statistical Package for the Social Sciences (SPSS) statistical software was used to analyze the data. Descriptive statistics were used to examine the demographics of the respondents, including gender, age, socioeconomic status, employment status, the

number of children, and the number of adults in the household. Next, the internal consistency reliability of the modified SBWCCS and both the affect regulation and affect regulation subscales was assessed using Cronbach's alpha. Cronbach's alpha coefficient of .7 or greater is acceptable (DeVallis, 2003). Following this analysis was an assessment of the assumptions of the multiple regression which includes an examination of multicollinearity, outliers, normality, linearity, and homoscedasticity. A logistic regression was also conducted, and unlike the linear regression, the logistic regression only has two assumptions, linearity and multicollinearity (Field, 2013).

Multiple and logistic regressions analysis was conducted to evaluate the research questions listed below. A separate analysis was conducted for each dependent variable. For the linear regression analysis, results were presented in a table that will contain the *F* value, *p* value, *beta* and *b* coefficients. The results were deemed significant if the *p* value was less than .05. For the logistic regression, the table contains the Wald statistic, *b* value, *p* value, and exponentiated *B* value. A *p* value of less than .05 indicated a significant association between the independent and dependent variables.

1. Is there a linear relationship between emotional strength and weight-related health factors in AA women? Here, mental and emotional strength is the independent variable and is measured using the affect regulation subscale of the SBWCCS. The scale consists of the summation of the nine subscale questions, which are all rated on a 5-point scale, ranging from 1 (*never*) to 5 (*almost always*). The dependent variables in this analysis are weight-related health factors. BMI, a continuous variable, is one of the

weight-related health factors. The other three are high blood pressure, stroke, heart disease, and DM, each of which is a dichotomous variable. As such, logistic regression analyses will be performed using these dependent variables.

H_0: There is no linear relationship between SBWCCS and the dependent variables BMI, high blood P\pressure, stroke, heart disease, and DM.

To test the first hypothesis, four logistic regressions and one linear regression were conducted. In the first logistic regression, SBWCCS was the independent variable and high blood pressures were the dependent variable. In the second logistic regression, SBWCCS was the independent variable and stroke was the dependent variable. SBWCCS was the independent variable and heart disease was the dependent variable in the third logistic regression and SBWCCS was also be the independent variable in the fourth logistic regression while DM was the dependent variable.

2. Is there a linear relationship between willingness to ask for help and weight-related health factors in AA women such as BMI, high blood pressure, stroke, heart disease, and DM? BMI was the continuous dependent variable, and high blood pressure, stroke, heart disease, and DM are dichotomous dependent variables. The independent variable was willingness to ask for help (I feel uncomfortable asking others for help on daily tasks) in daily tasks, scored on a 1 to 5 scale, in which 1 is *never* and 5 is *almost always*. A linear regression was used with BMI as the

dependent variable and logistic regressions were used with high blood pressure, stroke, heart disease, and DM as the dependent variables.

H_0: There is no relationship between willingness to ask for help and the dependent variables BMI, high blood pressure, stroke, heart disease, and DM.

To test my second hypothesis, there were four logistic regressions and one linear regression. Willingness to ask for help was the independent variable in both the logistic and linear regressions. In the first and second logistic regressions, the dependent variables were high blood pressure and stroke, respectively. In the third and fourth logistic regressions, the dependent variables were heart disease and DM, respectively. BMI served as the dependent variable in the linear regression.

3. Emotional eating and perceived stress were predictors of weight-related health factors in AA women? Weight-related health factors were BMI (a continuous dependent variable) and the three dichotomous dependent variables: high blood pressure, stroke, heart disease, and DM. Using emotional eating as the independent variable, which is computed from questions were scored on a scale, in which 1 is *no desire to eat* and 5 is *an overwhelming urge to eat*. Emotional eating was assessed using the EES, for which total scores were computed from a summation of the individual questions scores. Perceived stress scores were the summation of all the questions on the PSS, scored on a 1 to 5 scale where 1 is *never*, and 5 is *very often*.

H_0: There is no relationship between emotional eating and perceived stress and the dependent variables BMI, high blood pressure, stroke, heart disease, and DM.

To test the third hypothesis, there were four logistic regressions and one linear regression. Emotional eating and perceived stress were the independent variables in both the logistic and linear regressions. In the first and second logistic regressions, the dependent variables were high blood pressure and stroke, respectively. In the third and fourth logistic regressions, the dependent variables were heart disease and DM, respectively. BMI served as the dependent variable in the linear regression.

Chapter 4: Results

The purpose of this study was to gain an understanding of how the cultural expectation of emotional strength and accepting the identity of the SBW contribute to weight gain and obesity for AA women. I used a cross-sectional survey design to assess the relationship between the dependent variable BMI and the three independent variables of perceived stress, willingness to ask for help, and emotional strength. The research questions and hypotheses are as follows:

RQ1. Is there a linear relationship between mental and emotional strength and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women?

$H1_0$: There is no linear relationship between mental and emotional strength and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women.

$H1_a$: There is a linear relationship between mental and emotional strength and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women.

RQ2. Is there a linear relationship between willingness to ask for help and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women?

$H2_0$: There is no linear relationship between willingness to ask for help and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women.

$H2_a$: There is a linear relationship between willingness to ask for help and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women.

RQ3. Are emotional eating and perceived stress predictors of weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women?

$H3_0$: Emotional eating and perceived stress are not predictors of weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women.

$H3_a$: Emotional eating and perceived stress are predictors of weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women.

This chapter contains the results of the analyses. A reporting of the sample descriptive statistics is followed by an analysis of the internal consistency reliability of the modified SBWCCS, the PSS, and EES. The analysis was assessed using Cronbach's alpha. Following this reliability analyses is an assessment of the three research questions. One linear regression and four logistic regressions were conducted to answer each of the three research questions. The linear and logistic regression were preceded by tests of the assumptions of the multiple regression, which included an examination of multicollinearity, outliers, normality, linearity, and homoscedasticity, and the logistic regression which had only has two assumptions, linearity and multicollinearity (Field, 2013).

Data Collection

The data collection period lasted for 7 days. The administrator of BDO was responsible for posting the link for the survey on the BDO web site, their electronic newsletter, and their Facebook page. Participants were recruited from the BDO web site, their daily electronic newsletter, and the BDO Facebook page. Given that the recruitment took place from several different avenues, it is not known how many people were exposed to the survey link. As such it is not possible to calculate a response rate. There were 127 respondents who completed the survey. There were no departures from the original data collection plan in Chapter 3.

There were 127 Black female respondents who completed the survey. The average age of the women was 38.9 years (*SD* = 9.66). The largest ethnic group of women was AA (83.0%). Sixty-two percent of respondents had either a bachelors or graduate degree and 58% earned $50,000 or more. A plurality of respondents was married (43.7%), while a majority had at least one child (68.1%). See Table 1.

Table 1

Frequencies: Demographics

	N	*%*	*M*	*SD*
Age			38.91	9.66
Ethnicity				
African American	112	83.0		
Caribbean American	10	7.4		
Biracial	12	8.9		
Black Hispanic	1	.7		
Education Level				
High school degree or equivalent	9	6.7		
Some college but no degree	30	22.2		
Associates degree	12	8.9		
Bachelor's degree	37	27.4		
Graduate degree	47	34.8		
Marital Status				
Married	59	43.7		
Widowed	3	2.2		
Divorced	24	17.8		
Separated	2	1.5		
In a domestic partnership or civil union	3	2.2		
Single, but cohabitating with a significant other	16	11.9		
Single, never married	28	20.7		
Household income				
Below $10,000	5	3.7		
$10,000 to $19,999	12	8.9		
$20,000 to $29,999	11	8.1		
$30,000 to $39,999	12	8.9		
$40,000 to $49,999	16	11.9		
$50,000 to $59,999	16	11.9		
$60,000 or more	63	46.7		
Do You Have Children				
Yes	94	68.1		
No	44	31.9		

When compared to AA women in the general population, the sample tended to have higher income and was more educated. For those earning $50,000 or more there were 58.6% in the sample. According to Census data (2012), there are 30.1% in the general population who earn $50,000 or more. When considering those who have a bachelor degree or higher, in the sample there were 62.2%. Based on Census (2012) data, there are only 20% AA women who have a bachelor's degree or higher (Census, 2012). So, the sample may not be truly representative of the targeted general population.

Results

Cronbach's alpha reliability analysis was conducted on the 22 SBWCC questions, revealing an acceptable alpha coefficient value of .80. This indicated that the 22 SBWCC questions had acceptable reliability with this sample, when compared to .70, the minimum coefficient value of acceptable reliability (DeVellis R., 2003). Cronbach's alpha reliability was also conducted on the 25 questions related to the EES. The resulting alpha coefficient was .95, which indicated strong reliability. The resulting alpha coefficient of the 14 items of the PSS was .78, which is considered acceptable reliability, based on the minimum standard of .70.

The first research question asked is there a linear relationship between mental and emotional strength and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women. One multiple regression and 4 logistic regressions were conducted to answer these questions. In all regressions analyses, the independent variable was scores from the SBWCC. In the bivariate linear regression, the dependent variable was BMI scores. In the logistic regressions, the dependent variables

were the yes/no dichotomous variables, high blood pressure, heart disease, stroke, and DM.

RQ1a: Is there a linear relationship between SBWCC and BMI

A linear regression was conducted to evaluate if there was a linear relationship between SBWCC and BMI. However, before the multiple regression was conducted the assumptions of linearity, normality, and homoscedasticity were evaluated. Violations in the assumptions of the multiple regression lead to results that are likely inaccurate and unreliable (Field, 2012; Tabachnick & Fidell, 2012). To test the assumption of normality of the standardized residuals, a histogram was generated. The results indicated that the residuals fit the normal curve. There was no severe violation in the assumption of normality, see Figure 1.

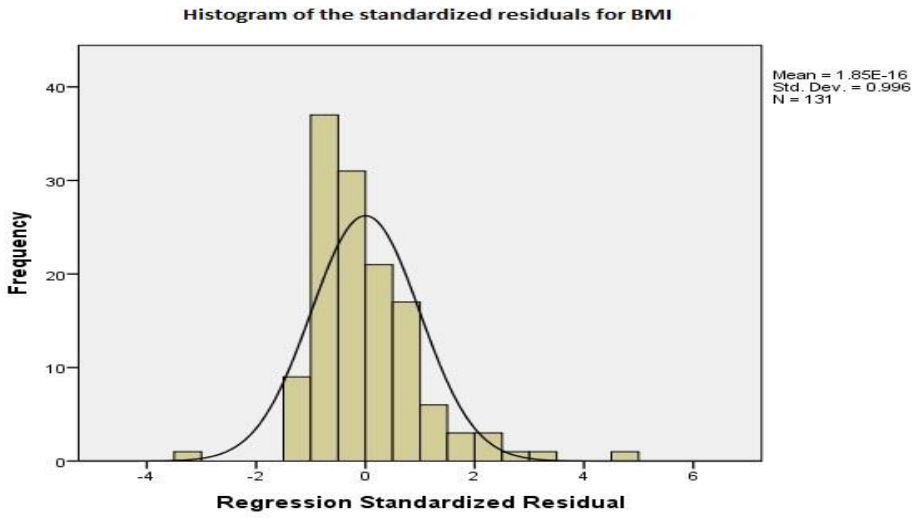

Figure 1. Histogram of the standardized residuals for BMI indicated no violation in normality.

The standardized residuals and the standardized predicted values were plotted to examine the assumptions of linearity and homoscedasticity. Figure 2 reveals that the plots are relatively random and evenly dispersed throughout the plot. This indicates that there was no violation in the assumption of normality or homoscedasticity (Field, 2012; Tabachnick & Fidell, 2012).

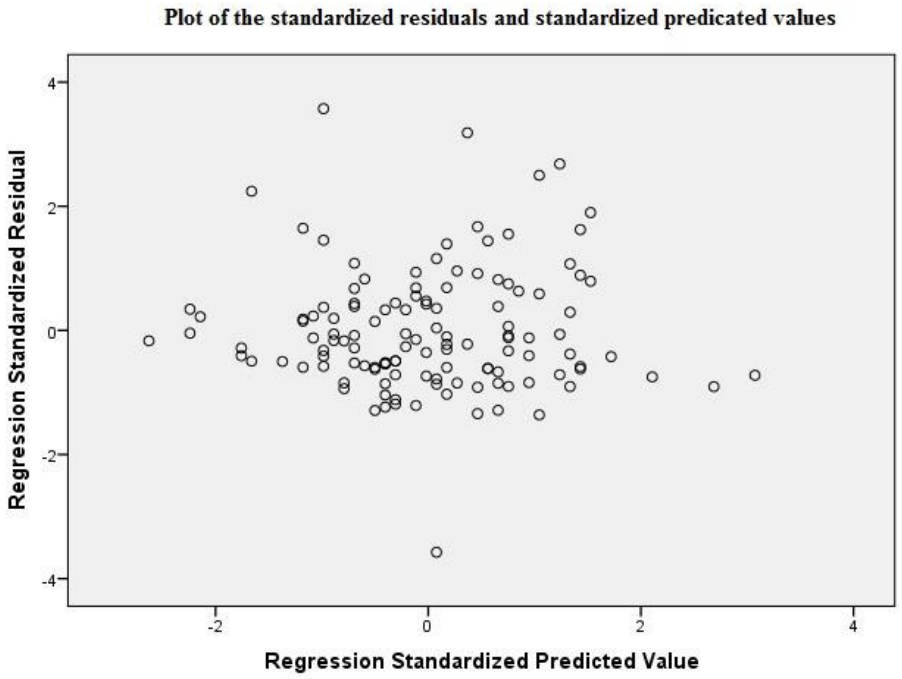

Figure 2. Plot of the standardized residuals and standardized predicated values indicated that there was no violation in the assumption of linearity or homoscedasticity for BMI.

The data were also checked for outliers. Standardized DFBetas were calculated for each respondent across all three independent variables. DFBeta is the value that represents the difference between a parameter estimated using all cases, and estimated again when one case is excluded (Field, 2012). DFBetas are calculated to determine if

any individual score has a substantial influence on the model, or said another way, is an outlier. DFBetas are calculated for each independent variable and also for the constant for each respondent. Stevens (2002) suggested looking at cases with absolute values of greater than 2 to determine if any values have a substantial influence on the model. The DFBetas for SWBCC ranged from -.30737 to .28841. None of the values are considered outliers. The multiple regression was conducted without data transformations.

Results of the bivariate linear regression indicated that the model was a significant predictor of BMI scores, $F(1, 123) = 9.128$, $p = .003$, where the variance explained by the model was 6.9% ($R^2 = .069$). An examination of the beta coefficients indicated that there was a significant weak positive relationship between SBWCC ($\beta = .263$, $p = .003$) and BMI, where increases in SBWCC scores were associated with increases in BMI. Beta coefficients indicate the strength and direction of the relationship between each independent variable and the dependent variable. They are similar in interpretation to the correlation coefficient (Field, 2012, Tabachnick et al., 2012). According to Cohen's (1988) guidelines of interpreting correlation coefficients, where .1 equals a small effect, .3 equals a moderate effect, and .5 or larger is a large effect, again the relationship between SBWCC and BMI was weak. See Tables G1 and G2.

Unlike the linear regression, the logistic regression only has two assumptions, linearity and multicollinearity (Field, 2013). Since there is only one independent variable in each of the four logistic regressions, linearity is the only assumption with which there is concern. To assess linearity, an interaction term was added to the regression model for the independent variable. The interaction terms consisted of the log of the independent

variable multiplied by the independent variable. If the beta coefficient of the interaction term is significant then there is a violation in the assumption of linearity. The analysis can still be performed if there is a violation, but the results may not be accurate or reliable. Results of the test of linearity indicated that there was no violation of linearity for high blood pressure, stroke, heart disease, or DM, as the beta coefficient p values for the interaction terms were all above .05. See Tables G3, G4, G5, and G6.

RQ1b: Is there a linear relationship between SBWCC and High Blood Pressure

To examine if there is an association between SBWCC and high blood pressure a logistic regression was conducted. The results indicated that the model was significant, χ^2 (1) = 6.182, p = .013, indicating that the model was able to distinguish between those who did and did not have high blood pressure. The model as a whole explained between 4.9% (Cox & Snell R Square) and 6.7% (Nagelkerke R Square) of the variability high blood pressure status, and correctly classified 66.1% of the cases. SBWCC recorded and odds ratio of 2.84, indicating that for every unit increase in SBWCC scores, the respondent was 2.84 times more likely to have high blood pressure. See Table G7.

RQ1c: Is there a linear relationship between SBWCC and Stroke

A logistic regression was conducted to examine if there was a significant association between SBWCC and whether someone did or did not have a stroke. The results of the logistic regression indicated that the model was not significant, χ^2 (1) = .318, p = .573, indicating that the model was not able to distinguish between those who have and have not had a stroke. See Table G8.

RQ1d: Is there a linear relationship between SBWCC and Heart Disease

To evaluate if there was a significant association between SBWCC and heart disease, a logistic regression was conducted. The results of the logistic regression indicated that the model was not significate, χ^2 (1) = 3.188, p = .074, indicating that the model was not able to distinguish between those who have and have not had heart disease. Therefore, the null hypothesis was not rejected. See Table G9.

RQ1e: Is there a linear relationship between SBWCC and DM

A logistic regression was conducted to determine if there is a significant association between SBWCC and DM. The results indicated that the model was not significant, χ^2 (1) = 1.457, p = .227, indicating that the model was not able to distinguish between those who have and have not had DM. See Table G10 and G35.

To evaluate the second research question, namely if there was a significant relationship between willingness to ask for help, the independent variable, and BMI, high blood pressure, heart disease, stroke, and DM, the five dependent variables, one multiple regression and four logistic regressions were conducted.

RQ2a: Is there a linear relationship between willingness to ask for help and BMI

Prior to conducting the linear regression to determine if willingness to ask for help and BMI were significantly related, tests of linearity and homoscedasticity were conducted to evaluate if the assumptions of the linear regression were met. Normality of the standardized residuals of the dependent variable was already established earlier in this study. This analysis was not repeated. Results indicated that there were no outliers, as the DFBetas for the independent variable ranged from -.450 to .356, well within the ±2

range. Results also indicated that there was no severe violation in linearity or homoscedasticity, based on the scatterplot of the standardized residuals and standardized predicted values, see Figure 3.

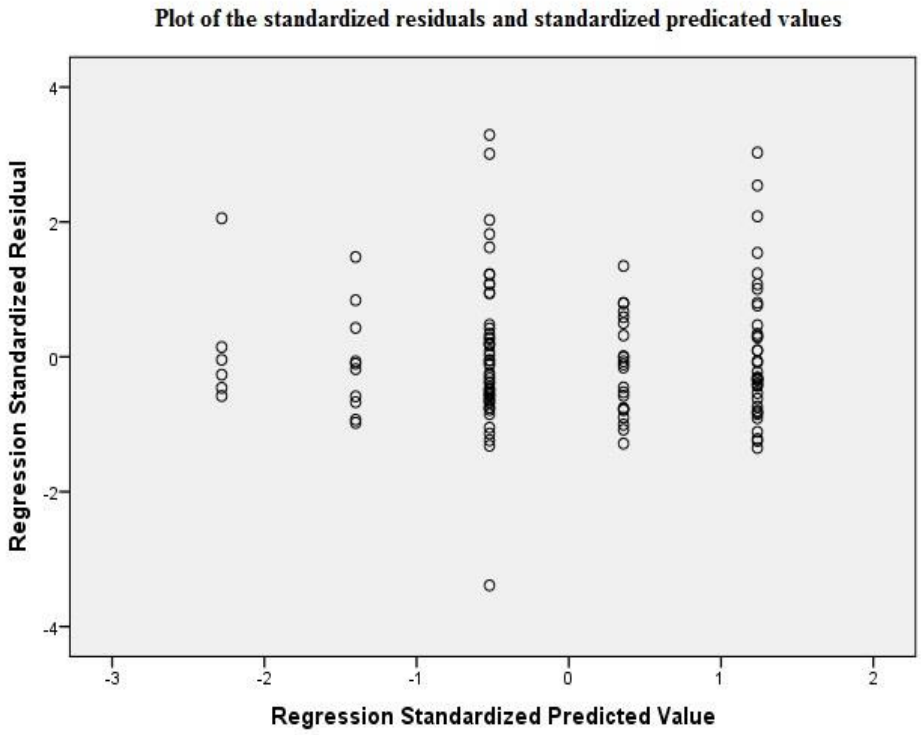

Figure 3. Plot of the standardized residuals and standardized predicated values indicated that there was no violation in the assumption of linearity or homoscedasticity for BMI.

The regression model was not significant, $F(1, 123) = 2.290$, $p = 1.33$, indicating that model was no better at predicting BMI scores than using the mean of BMI scores as a predictor (Field, 2012, Tabachnick & Fidell, 2012). There was no significant linear relationship between willingness to ask for help and BMI scores, so the null hypothesis was not rejected. See Tables G11 and G12.

The next four research questions assessing the relationship between the independent variable, willingness to ask for help, and the dependent variables, high blood pressure, stroke, heart disease, and DM will be tested using the logistic regression. Test of linearity were conducted among the four dependent variables. In this instance, the interaction term consisted of willingness to ask for help (q15) multiplied by the log of willingness ness to ask for help (Logq15). Results indicated that there was no violation in the assumption of linearity for high blood pressure, stroke, heart disease, and DM, as the p values for all the interaction terms were greater than .05. See Tables G13, G14, G15, and G16.

RQ2b: Is there a linear relationship between Willingness to Ask for Help and High Blood Pressure

The results indicated that the model was significant, χ^2 (1) = 6.915, p = .009, indicating that the model was able to distinguish between those who did and did not have high blood pressure. The model as a whole explained between 5.4% (Cox & Snell R Square) and 7.5% (Nagelkerke R Square) of the variability high blood pressure status, and correctly classified 66.1% of the cases. For willingness to ask for help, the higher your scores the less likely you were to ask for help, while lower scores were associated with a greater likelihood of asking for help. Willingness to ask for help (q15) recorded and odds ratio of 1.593, indicating that for every unit increase in willingness to ask for help scores, the respondent was 1.593 times more likely to have high blood pressure. As a result, the null hypothesis was rejected. See Table G17.

RQ2c: Is there a linear relationship between Willingness to Ask for Help and Stroke

The logistic regression testing the association between willingness to ask for help and stroke revealed that the model was not significant, χ^2 (1) = .265, p = .607, indicating that the model was unable to distinguish between those who did and did not have a stroke. As a result the null hypothesis was not rejected. See Table G18.

RQ2d: Is there a linear relationship between Willingness to Ask for Help and Heart Disease

Results of the logistic regression indicated that the model as a whole was significant, χ^2 (1) = 5.388, p = .020, indicating that the model was able to distinguish between those who did and did not have a heart disease. The model as a whole explained between 4.3% (Cox & Snell R Square) and 17.1% (Nagelkerke R Square) of the variability high blood pressure status, and correctly classified 96.8% of the cases. For willingness to ask for help, the higher your scores the less likely you were to ask for help, while lower scores were associated with a greater likelihood of asking for help. Willingness to ask for help (q15) recorded and odds ratio of 4.409, indicating that for every unit increase in willingness to ask for help scores, the respondent was 4.409 times less likely to have high blood pressure. As a result, the null hypothesis was rejected. See Table G 19.

RQ2e: Is there a linear relationship between Willingness to Ask for Help and DM

Results of the logistic regression examining the association between willingness to ask for help and DM, indicated that the model was not significant, χ^2 (1) = 2.537, p =

.111, indicating that the model was not able to distinguish between those who did and did not have DM. Therefore, the null hypothesis was not rejected. See Table G20.

RQ3a: Are emotional eating and perceived stress predictors of BMI?

To examine if emotional eating and perceived stress were significant predictors of BMI, a linear regression was conducted. In this analysis, emotional eating, and perceived stress were the independent variables and BMI was the dependent variable. Preliminary results indicated that there was no major violation in the assumption of normality as the standardized residuals were normally distributed (see Figure 4). A plot of the standardized residuals and the standardized predicted values revealed no violation in the assumptions of linearity and homoscedasticity as the points on the plot were relatively random and relatively evenly dispersed throughout the plot (see Figure 5). DFBETAs ranges for both perceived stress (-.421 to .441) and perceived stress (-.283 to .328) revealed that there were no outliers as the ranges did not exceed the absolute value of 2, which is the standard for detecting outliers.

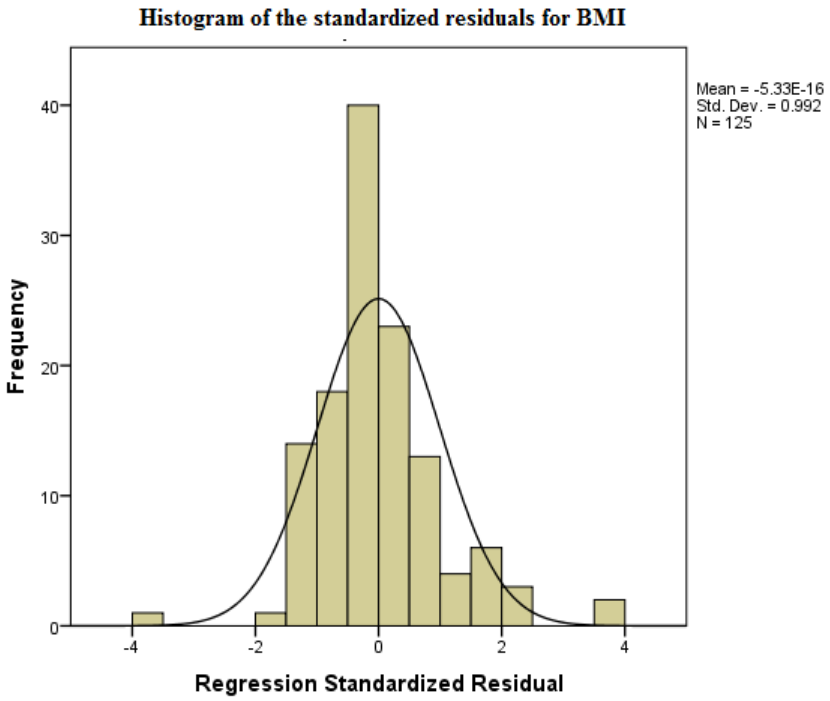

Figure 4. Histogram of the standardized residuals for BMI indicated no major violation in normality.

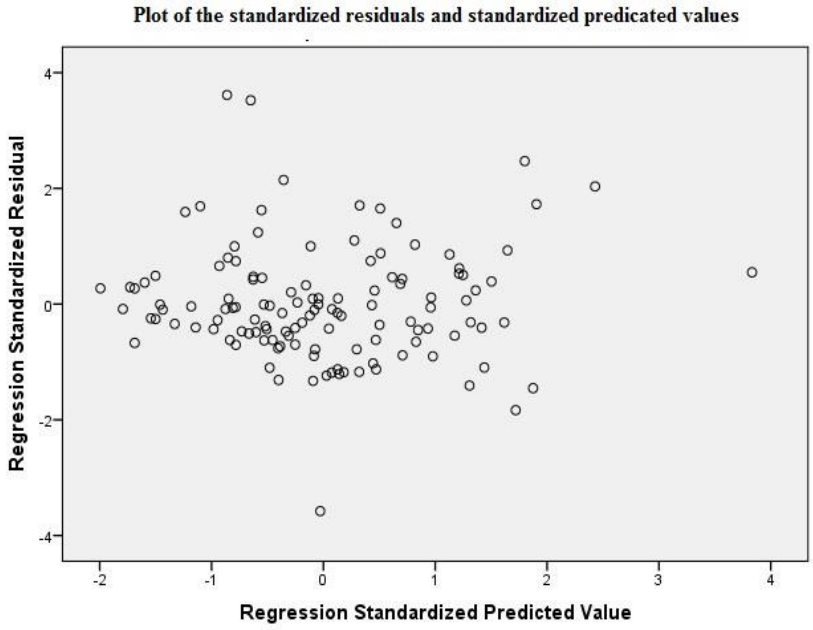

Figure 5. Plot of the standardized residuals and standardized predicated values indicated that there was no violation in the assumption of linearity or homoscedasticity.

Results of the linear regression indicated that the model was a significant predictor of BMI, $F(2, 122) = 6.725$, $p = .002$, where the model as a whole explained 9.9% ($R^2 = .099$) of the variability in BMI scores. A review of the individual model coefficients, revealed that emotional eating made a significant contribution to the model ($\beta = .266$, $p = .003$), where increases in emotional eating were associated with increases in BMI scores. However, perceived stress did not make a significant contribution to the model ($\beta = .122$, $p = .169$), as the p value was above the .05 p value threshold for significance. Given that the model as a whole containing perceived stress and emotional eating was significant, the null hypothesis was rejected. See Table G 33.

The next four research questions assessing the relationship between the independent variables, emotional eating and perceived stress, and the dependent variables, high blood pressure, stroke, heart disease, and DM were tested using the logistic regression. Test of linearity were conducted among the four dependent variables. In this instance, there were two interaction terms, one for perceived stress and one for emotional eating. The perceived stress interaction term consisted of the log of perceived stress multiplied by the perceived stress variable. The emotional eating interaction term consisted of the log of emotional eating multiplied by the emotional eating variable. Results indicated that for both perceived stress and emotional eating, there was no violation in the assumption of linearity for high blood pressure, stroke, heart disease, and DM, as the p values for all the interaction terms were greater than .05. See Tables G21 thru G28.

RQ3b: Are emotional eating and perceived stress predictors of High Blood Pressure?

Results of the logistic regression examining if emotional eating and perceived stress were significant predictors of high blood pressure, indicated that the model was not significant, χ^2 (2) = 1.092, p = .579, as the p value was above the .05 threshold. The results indicated that the model was not able to distinguish between those who did and did not have high blood pressure. Therefore, the null hypothesis was not rejected. See Table G29.

RQ3c: Are emotional eating and perceived stress predictors of Stroke?

The logistic model computed using emotional eating and perceived stress and the independent variables and the dichotomous variable stroke, was not significant, χ^2 (2) = 3.427, p = .180. This result indicated that the model was not able to distinguish between those who did and did not have a stroke. As a result, the null hypothesis was not rejected. See Table G30.

RQ3d: Are emotional eating and perceived stress predictors of Heart Disease?

Results of the logistic regression performed to determine if emotional eating and perceived stress predict heart disease. The results indicated that the model was not able to distinguish between those who did and did not have heart disease, χ^2 (2) = 2.538, p = .281. As of the result of the model not being a significant predictor of heart disease, the null hypothesis was not rejected. See Table G31.

RQ3e: Are emotional eating and perceived stress predictors of DM?

The final logistic regression with emotional eating and perceived stress as the independent variables and with DM as the dependent variable was conducted. The results indicated that the model was not able to distinguish between those who did and did not have DM, χ^2 (2) = 1.137, p = .566. As of the result of the model not being a significant predictor of heart disease, the null hypothesis was not rejected. See Table G32 thru G35.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this quantitative study was to examine how the embodiment of strength, resulting from cultural pressures, is related to using food as a coping mechanism and resulting weight gain for AA women. The dependent variables were weight-related health factors (BMI, high blood pressure, receiving treatment for or being diagnosed with DM, receiving treatment for or being diagnosed with heart related disease, receiving treatment for or being diagnosed with stroke), the belief that AA women must remain mentally and emotionally strong in all situations (emotional strength), and the AA women willingness to ask for help in their daily tasks (help seeking). The independent variable was the use of eating behaviors as a means to manage cultural stressors. This study was conducted because AA women have the highest rates of obesity and weight-related diseases compared to any cultural group in the United States (Tallyrand, 2006, 2012; Wilson & Washington, 2007). It was important to understand reasons for this outcome. The nature of the study was quantitative. The quantitative method was used to gather data for an increased understanding how the construct of emotional strength affects weight-related health factors in AA women.

This section presents the research objective and a summary of key findings related to research questions and hypotheses. The interpretation of findings presents a discussion of how these key findings relate to the literature and the theoretical framework. Next, study limitations, recommendations, implications, and a conclusion are presented.

Research Objective

The research objective was to demonstrate empirically that the embodiment of strength, resulting from cultural pressures, is related to using food as a coping mechanism and weight gain for AA women. The relationships between mental and emotional strength, willingness to ask for help, and emotional eating and perceived stress and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM).

Summary of Key Findings

Summary of Demographic Findings

There were 127 Black female respondents and the average age of the women was 38.9 years. The largest ethnic group were African American women, 62% of respondents had either a bachelors or graduate degree, and 58% earned $50,000 or more. Just less than half of respondents were married (43.7%) and most had at least one child.

Summary of Findings Related to First Research Question and Related Hypotheses

The first research question asked is there a linear relationship between mental and emotional strength and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women. The related hypotheses were: $H1_0$: There is no linear relationship between emotional strength and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women; and $H1_a$: There is a linear relationship between emotional strength and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women. One multiple regression and four logistic regressions were conducted to answer this question and test the hypotheses. A summary of

findings related to Research Question 1a through 1e and related hypotheses is provided below.

Summary of findings related to RQ1a. Is there a linear relationship between SBWCC and BMI? Results of the bivariate linear regression indicated that there was a significant weak positive relationship between SBWCC and BMI, where increases in SBWCC scores were associated with increases in BMI. The related null hypothesis was rejected.

Summary of findings related to RQ1b. Is there a linear relationship between SBWCC and high blood pressure? Findings from a logistic regression were that there is a significant association between SBWCC and high blood pressure. For every unit increase in SBWCC scores, the respondent was 5.735 times more likely to have high blood pressure. The related null hypothesis was rejected.

Summary of findings related to RQ1c. Is there a linear relationship between SBWCC and stroke? Findings from a logistic regression were that there was no significant association between SBWCC and whether someone did or did not have a stroke. The related null hypothesis was not rejected.

Summary of findings related to RQ1d. Is there a linear relationship between SBWCC and heart disease? Findings from a logistic regression were that there was no significant association between SBWCC and heart disease. The related null hypothesis was not rejected.

Summary of findings related to RQ1e. Is there a linear relationship between SBWCC and DM? Findings from a logistic regression were that there was no significant association between SBWCC and DM. The related null hypothesis was not rejected.

Summary of Findings Related to Second Research Question and Related Hypotheses

The second research question asked, is there a linear relationship between willingness to ask for help and BMI, high blood pressure, heart disease, stroke, and DM? The related hypotheses were: $H2_0$: There is no linear relationship between willingness to ask for help and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women; and $H2_a$: There is a linear relationship between willingness to ask for help and weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women. One multiple regression and four logistic regressions were conducted to evaluate this research question and related hypotheses. A summary of findings related to Research Question 2a through 2e and the related hypotheses is provided below.

Summary of findings related to RQ2a. Is there a linear relationship between willingness to ask for help and BMI? Findings from the regression model were not significant, indicating that there was no significant linear relationship between willingness to ask for help and BMI scores. The related null hypothesis was not rejected.

Summary of findings related to RQ2b. Is there a linear relationship between Willingness to Ask for Help and High Blood Pressure? Findings from the logistic

regression indicated that there was a significant linear relationship between willingness to ask for help and high blood pressure. As a result, the related null hypothesis was rejected.

Summary of findings related to RQ2c. Is there a linear relationship between Willingness to Ask for Help and Stroke? Findings from the logistic regression were that there was no significant association between willingness to ask for help and stroke. As a result the related null hypothesis was not rejected.

Summary of findings related to RQ2d. Is there a linear relationship between Willingness to Ask for Help and Heart Disease? Findings from the logistic regression were that there was a significant relationship between Willingness to ask for help and heart disease. As a result, the related null hypothesis was rejected.

Summary of findings related to RQ2e. Is there a linear relationship between willingness to ask for help and DM? Results of the logistic regression were that there was no significant association between willingness to ask for help and DM. The related null hypothesis was not rejected.

Summary of Findings Related to Third Research Question and Related Hypotheses

The third research question determined if emotional eating and perceived stress were predictors of BMI, High Blood Pressure, Stroke, Heart Disease, and DM. The related hypotheses were: $H3_0$: Emotional eating and perceived stress are not predictors of weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women; and $H3_a$: Emotional eating and perceived stress are predictors of weight-related health factors (BMI, high blood pressure, heart disease, stroke, and DM) in AA women. Linear regression was used for the

first question assessing the relationship between emotional eating and perceived stress and BMI. The next four research questions assessing the relationship between emotional eating and perceived stress and high blood pressure, stroke, heart disease, and DM were tested using the logistic regression. A summary of findings related to Research Question 3a through 3e and related hypotheses is provided below.

Summary of findings related to RQ3a. Are emotional eating and perceived stress predictors of BMI? Results of the linear regression indicated that emotional eating and perceived stress were significant predictors of BMI. The related null hypothesis was rejected.

Summary of findings related to RQ3b. Are emotional eating and perceived stress predictors of high blood pressure? Results of the logistic regression were that emotional eating and perceived stress were not significant predictors of high blood pressure. The related null hypothesis was not rejected.

Summary of findings related to RQ3c. Are emotional eating and perceived stress predictors of stroke? Findings from the logistic regression were that emotional eating and perceived stress were not significant predictors of stroke. As a result, the related null hypothesis was not rejected.

Summary of findings related to RQ3d. Are emotional eating and perceived stress predictors of heart disease? Results of the logistic regression were that emotional eating and perceived stress did not significantly predict heart disease. The related null hypothesis was not rejected.

Summary of findings related to RQ3e. Are emotional eating and perceived stress predictors of DM? Findings from the logistic regression were that emotional eating and perceived stress did not significantly predict DM. The related null hypothesis was not rejected.

Interpretation of the Findings

The following describes the ways that study findings confirm, disconfirm, or extend knowledge in the discipline by comparing them with what has been found in the peer-reviewed literature described in Chapter 2. This interpretation also describes, analyzes, and interprets the study findings in the context of the theoretical framework.

Significance of Findings for First Research Question and Related Hypotheses Compared to Peer-Reviewed Literature

The findings for the first research question and related hypotheses showed a significant relationship between mental and emotional strength and BMI and high blood pressure. However, there was no significant relationship found between mental and emotional strength and heart disease, stroke, and DM. AA women have the highest rates of obesity and weight-related diseases such as heart disease, stroke, and DM (Flegal et al., 2012; Ogden et al., 2010; U.S. Department of Health and Human Services Centers for Disease Control and Prevention, 2010). However, whether these weight-related health factors are related to mental and emotional strength, remains unknown. The SBW identity is related to poor coping responses (Everett et al., 2010) and optimal coping responses are needed to maintain optimal health and psychological well-being.

Everett et al. (2010) found that SBW identity and poor coping led to stress-related problems, such as hair falling out, anxiety and depression, and sleep deprivation; but, more information was needed to understand how SBW identity was related to other health outcomes. This study presented with new information. Specifically, the findings that mental and emotional strength were significantly related to BMI and high blood pressure provided new information. Findings that no significant relationship was found between mental and emotional strength and heart disease, stroke, and DM also provided new information.

Significance of Findings for Second Research Question and Related Hypotheses Compared to Peer-Reviewed Literature

The findings for the second research question and related hypotheses showed a significant relationship between willingness to ask for help and high blood pressure and heart disease. However, no significant linear relationship was found between willingness to ask for help and BMI, stroke, and DM.

There is a lack of research regarding willingness to ask for help and related factors. Everett et al. (2010) pointed out that SBW AA females have multiple coping methods, such as having social support networks, to reduce their levels of personal stress, but they tend to not be willing to ask for help. Current study findings that willingness to ask for help was significantly related to high blood pressure and heart disease provided new information regarding outcomes of this coping mechanism. The findings that no significant relationship was found between willingness to ask for help and BMI, stroke, and DM also provided new information for further study.

Significance of Findings for Third Research Question and Related Hypotheses Compared to Peer-Reviewed Literature

The findings for the third research question and related hypotheses showed a significant relationship between emotional eating and perceived stress and BMI. However, there was no significant relationship found between emotional eating and perceived stress and high blood pressure, stroke, heart disease, and DM.

The SBW persona with related perceptions of stress may contribute to overeating and obesity (Hamilton-Mason et al., 2009; Piquero et al., 2010). AA women may present with this persona of having emotional strength (Bell, 2004; Hill, 2009; Torres et al., 2010), and this leads to poor coping mechanisms such as overeating and resulting obesity. The current study finding that emotional eating and perceived stress were significantly related and BMI was consistent with previous literature findings. However, findings that no significant relationship was found between emotional eating and perceived stress and high blood pressure, stroke, heart disease, and DM provided new information.

Significance of Findings Compared to Theoretical Framework

The theoretical framework for this study was womanism (Collins, 1996; Karenga & Tembo, 2012). This theory conceptualizes AA women in a manner that incorporates their heritage, history, culture, and ethnic identity (Boisnier, 2003). With this framework, it is understood that AA individuals should love their own race and not aspire to achieve the EA standards of beauty or accept EA cultural norms (Kohzadi, Azzizmohammadi, & Afrougheh, 2011). The theory of womanism was used as a framework for this study

because this theory upholds the idea that AA women are influenced by their culture and this impacts their health (Harvey, 2013). This theoretical framework provides an explanation of the ways that the AA women's weight is impacted by the cultural expectation to remain emotionally and psychologically strong at all times. This may be a factor in understanding the eating behaviors and weight gain occurring in this AA population (Beauboeuf-Lafontant, 2005, 2007, 2008). Current study findings are analyzed and interpreted in the context of this theoretical framework.

The findings that mental and emotional strength were significantly related to BMI and high blood pressure were consistent with the theoretical framework. While health factors related to mental and emotional strength remains unknown, researchers have found that the SBW identity is related to poor coping responses (Everett et al., 2010), and optimal coping responses are needed to maintain optimal health. The findings that mental and emotional strength were significantly related to BMI and high blood pressure provided new information; but, these findings were consistent with the view that SBW identity is related to poor coping responses, stress, and health problems (Everett et al., 2010). Findings that no significant relationship was found between mental and emotional strength and heart disease, stroke, and DM were less consistent with the theoretical framework, and provided new information.

The study findings that willingness to ask for help was significantly related to high blood pressure and heart disease provided new information that is consistent with the theoretical framework. Womanists posit that AA women are encouraged to persevere, overcome obstacles, survive hardships, and avoid displaying signs of perceived emotional

weakness, such as crying or asking for help (Boisnier, 2003; Collins, 2001; Hamilton-Mason et al., 2009; Karenga, 2012; Miguda, 2010; Tsuruta, 2012; Winkle-Wagner, 2008). It is theorized that AA women need to appear emotionally strong to resist all forms of oppression (Tsuruta, 2012). As noted by Everett et al. (2010), SBW AA females tend to not be willing to ask for help and this leads to stress and less optimal coping and health outcomes. The findings that no significant relationship was found between willingness to ask for help and BMI, stroke, and DM, were not consistent with the theoretical framework, and provided new information.

The study finding that emotional eating and perceived stress were significantly related and BMI was consistent with the theoretical framework. The SBW persona with related perceptions of stress can lead to overeating and obesity (Hamilton-Mason et al., 2009; Piquero et al., 2010). The study findings, that no significant relationship was found between emotional eating and perceived stress and high blood pressure, stroke, heart disease, and DM were not consistent with the theoretical framework, and provided new information.

Limitations of the Study

The following described the limitations to generalizability and/or trustworthiness, validity, and reliability that arose from execution of the study. Study limitations regard the sample. Since the sample selected for this study was from an available, volunteer, Internet population, the results of this research may not be generalizable to nonvolunteer and non-Internet individuals. The study is further limited by the sample size of 127 participants which included only AA women ages 18 and older. This sample limits the

generalizability of findings to other AA women of different backgrounds including women who do not use the internet for survey purposes.

The study is limited by its design. The use of a quantitative design, with online survey research, did not allow for detailed descriptions of the variables studied, and limited findings. Since the study variables were not directly manipulated, results were observed from existing groups, and findings were descriptive. The study is also limited by the choice of variables and instruments. The use of BMI had limitations, since factors such as age, sex, ethnicity, and muscle mass can influence BMI as well as the relationship between BMI and body fat. BMI does not distinguish between excess fat, muscle, or bone mass, and it does not provide any indication of the distribution of fat among individuals (Rothman, 2008). The use of self-report measures to include the SBWCCS, EES, and the PSS measurement tools, while considered reliable and valid, presented with limitations, and potential bias in self-reporting.

Recommendations

The following section is a description of recommendations for further research that are grounded in the strengths and limitations of the current study as well as the literature reviewed in Chapter 2. Future studies are needed to explore current findings and the topic, with consideration for methodological issues. Sample, design, instruments, variables, and cultural group comparison recommendations are provided.

Sample Recommendation

Since there are study limitations due to the sample, it is recommended that it be replicated in a future study that includes a larger sample. This new sample would need to

include a wider range of educational levels and ethnic backgrounds, randomly selected from multiple geographic locations. It is also recommended that the sample include a non-internet population.

Design Recommendation

Since the study is limited by its design, it is recommended that a future study explore multiple variables with a mixed approach that would allow for the gathering of quantitative and qualitative data for analysis. For example, more information is needed to understand why all health-related outcomes were not significantly related to each of the independent variables (mental and emotional strength, willingness to ask for help, and emotional eating and perceived stress). Additional factors such as family functioning and psychological symptoms, or self-esteem levels, that may affect coping and health outcomes also need to be controlled for or measured to determine the effects of the independent variables (mental and emotional strength, willingness to ask for help, and emotional eating and perceived stress) on obesity and health-related outcomes.

Instruments Recommendations

Since the study is limited by the choice of instruments and BMI information, it is recommended that a future study include the use of other assessments of overweight and health problems. Measures of BMI and health problems that do not rely on self-reports would help overcome limitations of these assessment tools and increase the reliability and validity of findings. It is also recommended that additional reliable and valid instruments be used to assess factors such as family functioning and psychological symptoms or other

factors such as self-esteem levels, which may affect coping strategies and health outcomes.

Variables Recommendations

This study provided important and useful information regarding the relationships between mental and emotional strength, willingness to ask for help, and emotional eating and perceived stress and the dependent variables (BMI, high blood pressure, stroke, heart disease, and DM). However, a more comprehensive understanding of the topic would be even more beneficial. It is therefore recommended that a future study further investigate the variables and findings from this study. For example, a study is needed to explore reasons for both significant and not significant health outcomes. While study findings demonstrated that mental and emotional strength, willingness to ask for help, and emotional eating and perceived stress were related to some outcomes and not others; reasons for these findings are not clear. Additional variables such as family functioning, psychological symptoms, and self-esteem, that may impact outcomes, need to be explored.

Cultural Group Comparison Recommendations

To further understand health outcomes as they relate to cultural factors, a future study is recommended to explore, compare, and contrast AA women and other cultural groups. For instance, when compared to other cultural groups, AA women may or may not have increased weight and related outcomes directly related to cultural influences (Ard et. al., 2013; Hill, 2009). AA female acceptance of the persona of the SBW, may be

a cultural factor that contributes to high rates of obesity in this population (Beauboeuf-Lafontant, 2005; Woods-Giscombe, 2010); however, there may be other factors involved.

The SBW upholds the cultural expectation to remain emotionally and psychologically strong at all times (Kohzadi, Azzizmohammadi, & Afrougheh, 2011). These women typically will not show signs of emotional distress or ask for help. Therefore, SBW may experience more chronic stress than women of other cultural influences (Woods-Giscombe, 2010). This chronic stress, often more prevalent among AA women, may be related to obesity in some instances (Sutherland, 2013); but, more information is needed to fully understand this outcome. A comparison of groups would help to comprehend the impact of cultural influences on the health-related consequences of obesity for AA women. This is important since this population presents with higher levels of poor health outcomes (increased rates of high blood pressure, DM, and heart-related diseases), compared to other cultural and ethnic groups (Tallyrand, 2006; Wilson & Washington, 2007).

Implications

Positive Social Change

Implications of findings are that mental and emotional strength are significantly related to BMI and high blood pressure, willingness to ask for help is significantly related to high blood pressure and heart disease, and emotional eating and perceived stress are significantly related to BMI. Since this study provided information regarding the effects of cultural expectations of emotional strength on AA women's health outcomes, these results can be used by healthcare providers to address weight-related issues with this

population. These findings could lead to positive social change since evidence was provided to help healthcare professionals understand the importance of considering cultural factors when investigating the psychological issues associated with weight gain for this population. Current study findings can be used to further understand consequences of the expectation of emotional strength for the AA female, their family, and society. This awareness could create positive social change, as AA women could seek out more effective ways of coping, which could lead to more optimal health outcomes. While there may be methodological, theoretical, and other considerations for a future study of the current findings, results can be used for positive social changes, across the AA female population ages 18 and older.

Methodological, Theoretical, and/or Empirical Implications

The study findings were that mental and emotional strength, willingness to ask for help, and emotional eating and perceived stress were significantly related to some health outcomes, but not others. This implies that there are methodological, theoretical, and/or empirical implications. These implications need to be addressed in future studies.

With regard to methodological implications, the current study provided initial quantitative information regarding AA women, obesity, and related health outcomes. Since findings were limited, a future study is needed with a mixed design to gather quantitative and qualitative data for a more comprehensive understanding of the issues. This future study would need to include a larger sample, randomly selected from different locations. The sample would need to include all age groups and multiple ethnic groups.

The study would need to explore multiple factors that could potentially influence outcomes.

Considering the theoretical framework, a future study is needed to overcome current study method limitations and compare different ethnic groups and the cultural influences for these groups. While the SBW persona may influence outcomes for AA women, there may be other cultural stances that influence women from different ethnic backgrounds. These influences need to be compared to fully comprehend the impact of the SBW persona on obesity and related health outcomes.

Empirical implications are that while study findings provided insights, a future study is needed to add to the empirical knowledge with comparisons of cultural groups, obesity, and related health outcomes. There may be other factors such as low self-esteem levels, family problems, or psychological problems that influence outcomes. A future study is needed to control or assess these factors and fully understand the influence of the SBW persona.

Recommendations for Practice

Since study findings revealed specific factors related to poor health outcomes, findings can be used in practice to help AA women deal with stress and develop more optimal coping mechanisms. Implications of findings are that AA women with a SBW persona may develop poor coping mechanisms that have the potential to lead to overeating, obesity, and poor health outcomes. While this study presents with limitations, it provided important information regarding how to help the AA female with these problems.

It is recommended that when helping the AA female, it would be important to provide information about the tendency to take on the SBW persona, refuse to ask for help, and develop emotional eating responses with chronic stress. Practice recommendations include providing the AA female with support, help when needed, and alternative coping strategies that do not demand a constant strong stance in the face of all problems. This assistance would help the AA female overcome current SBW tendencies.

Conclusion

There are six conclusions for the study that are summarized below. The first conclusion is that there was a significant relationship between mental and emotional strength and BMI and high blood pressure. Next, there was no significant relationship between mental and emotional strength and heart disease, stroke, and DM. However, is should be noted that there was a significant relationship between willingness to ask for help and high blood pressure and heart disease. With that being said, there was no significant relationship between willingness to ask for help and BMI, stroke, and DM. There was a significant relationship between emotional eating and perceived stress and BMI. The final conclusion made in this study was that there was no significant relationship between emotional eating and perceived stress and high blood pressure, stroke, heart disease, and DM.

This study presented with limitations, but also provided findings that the SBW persona, unwillingness to ask for help, and emotional eating and stress, lead to obesity and poor health outcomes for AA females. While a future study is needed to further explore these findings, the information gleaned from this study can be used today, to help

AA women overcome their need to appear strong at all times, and change the way they cope with stress. Standing strong in the face of diversity may be important; but, an over-tendency to maintain this stance with a refusal to ask for help, can result in chronic stress and maladaptive coping responses such as emotional eating. These factors can lead to obesity and poor health outcomes and need to be changed.

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Appendix A: SBW Cultural Construct Scale

Instructions – Please rate how often you think that each of the following statements apply to you.

B1. I believe that it is best not to rely on others.

Never Rarely Sometimes Frequently Almost Always

B2. I feel uncomfortable asking others for help.

Never Rarely Sometimes Frequently Almost Always

B3. I have difficulty showing my emotions.

Never Rarely Sometimes Frequently Almost Always

B4. I do not like to let others know when I am feeling vulnerable.

Never Rarely Sometimes Frequently Almost Always

B5. I believe that everything should be done to a high standard.

Never Rarely Sometimes Frequently Almost Always

B6. I am independent.

Never Rarely Sometimes Frequently Almost Always

B7. I take on more responsibilities than I can comfortably handle.

Never Rarely Sometimes Frequently Almost Always

B8. I believe I should always live up to other's expectations.

Never Rarely Sometimes Frequently Almost Always

B9. I should be able to handle all that life gives me.

Never Rarely Sometimes Frequently Almost Always

B10. I am strong.

Never Rarely Sometimes Frequently Almost Always

B11. I need people to see me as always confident.

Never Rarely Sometimes Frequently Almost Always

B12. I like being in control in relationships.

Never Rarely Sometimes Frequently Almost Always

B13. I cannot rely on others to meet my needs.

Never Rarely Sometimes Frequently Almost Always

B14. I take on others' problems.

Never Rarely Sometimes Frequently Almost Always

B15. I feel that I owe a lot to my family.

Never Rarely Sometimes Frequently Almost Always

B16. People think that I don't have feelings.

Never Rarely Sometimes Frequently Almost Always

B17. I try to always maintain my composure.

Never Rarely Sometimes Frequently Almost Always

B18. It is hard to say, "No," when people make requests of me.

Never Rarely Sometimes Frequently Almost Always

B19. I do not like others to think of me as helpless.

Never Rarely Sometimes Frequently Almost Always

B20. I do not let most people know the "real" me.

Never Rarely Sometimes Frequently Almost Always

B21. In my family I give more than I receive.

Never Rarely Sometimes Frequently Almost Always

B22. At times I feel overwhelmed with problems.

Never Rarely Sometimes Frequently Almost Always

Appendix B: Emotional Eating Scale

We all respond to different emotions in different ways. Some types of feelings lead people to experience an urge to eat. Please indicate the extent to which the following feelings lead you to feel an urge to eat by checking the appropriate box.

No desire to eat A small desire to eat A moderate desire to eat A strong desire to eat An overwhelming urge to eat

28) Resentful
29) Discouraged
30) Shaky
31) Worn out
32) Inadequate
33) Excited
34) Rebellious
35) Blue
36) Jittery
37) Sad
38) Uneasy
39) Irritated
40) Jealous
41) Worried
42) Frustrated
43) Lonely
44) Furious
45) On edge
46) Confused
47) Nervous
48) Angry
49) Guilty
50) Bored
51) Helpless
52) Upset

Appendix C: Perceived Stress Scale

The questions in this scale ask you about your feelings and thoughts during THE LAST MONTH. In each case, you will be asked to indicate your response by placing an "X" over the circle representing HOW OFTEN you felt or thought a certain way. Although some of the questions are similar, there are differences between them and you should treat each one as a separate question. The best approach is to answer fairly quickly. That is, don't try to count up the number of times you felt a particular way, but rather indicate the alternative that seems like a reasonable estimate.

Never Almost Never Sometimes Fairly Often Very Often

In the last month, how often have you been upset because of something that happened unexpectedly?

E1.) In the last month, how often have you felt that you were unable to control the important things in your life?

E2.) In the last month, how often have you felt nervous and "stressed"?

E3.) In the last month, how often have you dealt successfully with day to day problems and annoyances?

E4.) In the last month, how often have you felt that you were effectively coping with important changes that were occurring in your life?

E5.) In the last month, how often have you felt confident about your ability to handle your personal problems?

E6.) In the last month, how often have you felt that things were going your way?

E7.) In the last month, how often have you found that you could not cope with all the things that you had to do?

E8.) In the last month, how often have you been able to control irritations in your life?

E9.) In the last month, how often have you felt that you were on top of things?

E10.) In the last month, how often have you been angered because of things that happened that were outside of your control?

E11.) In the last month, how often have you found yourself thinking about things that you have to accomplish?

E12.) In the last month, how often have you been able to control the way you spend your time?

E13.) In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

Appendix D: General Health Survey Questionnaire

If you were having a personal or emotional problem, how likely is it that you would seek help from the following people?

Please indicate your response by putting a line through the number that best describes your intention to seek help from each help source that is listed.
1 = Extremely Unlikely 3 = Unlikely 5 = Likely 7 = Extremely Likely

a. Intimate partner (e.g., girlfriend, boyfriend, husband, wife, de' facto)
b. Friend (not related to you)
c. Parent
d. Other relative/family member
e. Mental health professional (e.g. psychologist, social worker, counsellor)
f. Phone helpline (e.g. Lifeline
g. Doctor/GP
h. Minister or religious leader (e.g. Priest, Rabbi, Chaplain)
i. I would not seek help from anyone
j. I would seek help from another not listed above (please list in the space provided, (e.g., work colleague. If no, leave blank)____

Appendix E: Behavioral Risk Factor Surveillance System

The specific questions that will be used are as follows:

Have you EVER been told by a doctor, nurse, or other health professional that you have high blood pressure?

Are you currently taking medicine for your high blood pressure?

Have you EVER been told by a doctor, nurse or other health professional that your blood cholesterol is high?

Have you ever been told that you that you had a heart attack also called a myocardial infarction?

Have you ever been told that you had angina or coronary heart disease?

Have you ever been told that you had a stroke?

Have you ever been told that you have diabetes?

Have you ever been told by a doctor or other health professional that you have pre-diabetes or borderline diabetes?

The answer choices for these questions will be 1= yes, 2 = no, 7 = don't know/ not sure,

and 9 = refused.

Appendix F: Complete Survey

Questionnaire

Hello. Thank you for agreeing to take this study. This study is confidential and no personally identifiable information is being collected. Today we are doing a survey about beliefs and attitudes on health related issues. Your feedback is very important. This survey should take about 45 minutes to complete.

A1. What is your birthdate? _____

A2. Where were you born (city, state, country)? _____
_____

A3. If you were not born in the U.S., how long have you lived here? _____

A4. Do you have any children (circle one) YES NO (go to A6)

A5. Please list the ages and sexes of your children_____
_____

A6. What is your marital/relationship status?

Single Married Divorced Separated Widowed

A7. If you are currently in college, what is your classification? (Please circle, if not in college go to A8)

Freshman Sophomore Junior Senior Graduate student

A8. If you are not currently in college, what is the highest education degree that you have obtained?
A. None
B. High school diploma
C. Associate degree
D. Vocational degree (e.g. cosmetology school, etc.)
E. Bachelor's degree
F. Master's degree
G. Ph.D., J.D., M.D., etc.

A9. What race do you consider yourself to be? _____

A10. Think of which racial subgroup best describes you and circle the category which is closest.
A. African American
B. Caribbean American
C. Biracial (with one parent of African Descent)
D. Black Hispanic
E. Other (specify :_____)

A11. Think of all of the income from persons who live in your home. Please circle the category (A, B, C, etc.) which is closest to your household income last year (to Jan. 1).
A. $10,000 or below
B. $10,000 to 19,999
C. $20,000 to 29,999
D. $30,000 to 39,999
E. $40,000 to 49,999
F. $50,000 to 59,999
G. Over $60,000

What is your height, in feet and inches? For example 5 ft. 4 in
_____ft. _____ in.

What is your weight, in pounds? For example 150 pounds
_____ Pounds

B. Instructions-Please rate how often you think that each of the following statements apply to you.

B1.) I believe that it is best not to rely on others.
Never Rarely Sometimes Frequently Almost Always

B2.) I feel uncomfortable asking others for help.
Never Rarely Sometimes Frequently Almost Always

B3.) I have difficulty showing my emotions.
Never Rarely Sometimes Frequently Almost Always

B4.) I do not like to let others know when I am feeling vulnerable.
Never Rarely Sometimes Frequently Almost Always

B5.) I believe that everything should be done to a high standard.
Never Rarely Sometimes Frequently Almost Always

B6.) I am independent.

Never Rarely Sometimes Frequently Almost Always

B7.) I take on more responsibilities than I can comfortably handle.
Never Rarely Sometimes Frequently Almost Always

B8.) I believe I should always live up to other's expectations.
Never Rarely Sometimes Frequently Almost Always

B9.) I should be able to handle all that life gives me.
Never Rarely Sometimes Frequently Almost Always

B10.) I am strong.
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B11.) I need people to see me as always confident.
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B12.) I like being in control in relationships.
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B13.) I cannot rely on others to meet my needs.
Never Rarely Sometimes Frequently Almost Always

B14.) I take on others' problems.
Never Rarely Sometimes Frequently Almost Always

B15.) I feel that I owe a lot to my family.
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B16.) People think that I don't have feelings.
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B17.) I try to always maintain my composure.
Never Rarely Sometimes Frequently Almost Always

B18.) It is hard to say, "No," when people make requests of me.
Never Rarely Sometimes Frequently Almost Always

B19.) I do not like others to think of me as helpless.
Never Rarely Sometimes Frequently Almost Always

B20.) I do not let most people know the "real" me.

Never Rarely Sometimes Frequently Almost Always

B21.) In my family I give more than I receive.
Never Rarely Sometimes Frequently Almost Always

B22.) At times I feel overwhelmed with problems.
Never Rarely Sometimes Frequently Almost Always
C). the answer choices for these questions will be 1= yes, 2 = no, 7 = don't know/ not sure, and 9 = refused

1. Have you EVER been told by a doctor, nurse, or other health professional that you have high blood pressure?
2. Are you currently taking medicine for your high blood pressure?
3. Have you EVER been told by a doctor, nurse or other health professional that your blood cholesterol is high?
4. Have you ever been told that you that you had a heart attack also called a myocardial infarction?
5. Have you ever been told that you had angina or coronary heart disease?
6. Have you ever been told that you had a stroke?
7. Have you ever been told that you have diabetes?
8. Have you ever been told by a doctor or other health professional that you have pre-diabetes or borderline diabetes?

D). We all respond to different emotions in different ways. Some types of feelings lead people to experience an urge to eat. Please indicate the extent to which the following feelings lead you to feel an urge to eat by checking the appropriate box.

No desire to eat A small desire to eat A moderate desire to eat A strong desire to eat An overwhelming urge to eat

1. Resentful
2. Discouraged
3. Shaky
4. Worn out
5. Inadequate
6. Excited
7. Rebellious
8. Blue
9. Jittery
10. Sad
11. Uneasy
12. Irritated
13. Jealous
14. Worried
15. Frustrated
16. Lonely
17. Furious
18. On edge
19. Confused
20. Nervous
21. Angry
22. Guilty

23. Bored

24. Helpless

25. Upset

E). The questions in this scale ask you about your feelings and thoughts during THE LAST MONTH. In each case, you will be asked to indicate your response by placing an "X" over the circle representing HOW OFTEN you felt or thought a certain way. Although some of the questions are similar, there are differences between them and you should treat each one as a separate question. The best approach is to answer fairly quickly. That is, don't try to count up the number of times you felt a particular way, but rather indicate the alternative that seems like a reasonable estimate.

Never Almost Never Sometimes Fairly Often Very Often

In the last month, how often have you been upset because of something that happened unexpectedly?

E1.) In the last month, how often have you felt that you were unable to control the important things in your life?

E2.) In the last month, how often have you felt nervous and "stressed"?

E3.) In the last month, how often have you dealt successfully with day to day problems and annoyances?

E4.) In the last month, how often have you felt that you were effectively coping with important changes that were occurring in your life?

E5.) In the last month, how often have you felt confident about your ability to handle your personal problems?

E6.) In the last month, how often have you felt that things were going your way?

E7.) In the last month, how often have you found that you could not cope with all the things that you had to do?

E8.) In the last month, how often have you been able to control irritations in your life?

E9.) In the last month, how often have you felt that you were on top of things?

E10.) In the last month, how often have you been angered because of things that happened that were outside of your control?

E11.) In the last month, how often have you found yourself thinking about things that you have to accomplish?

E12.) In the last month, how often have you been able to control the way you spend your time?

E13.) In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

F. If you were having a personal or emotional problem, how likely is it that you would seek help from the following people?

Please indicate your response by putting a line through the number that best describes your intention to seek help from each help source that is listed.
1 = Extremely Unlikely 3 = Unlikely 5 = Likely 7 = Extremely Likely

a. Intimate partner (e.g., girlfriend, boyfriend, husband, wife, de' facto)
b. Friend (not related to you)
c. Parent
d. Other relative/family member
e. Mental health professional (e.g. psychologist, social worker, counsellor)
f. Phone helpline (e.g. Lifeline
g. Doctor/GP
h. Minister or religious leader (e.g. Priest, Rabbi, Chaplain)
i. I would not seek help from anyone
j. I would seek help from another not listed above (please list in the space provided, (e.g., work colleague. If no, leave blank)____

This is the end of our survey. Thank you again for your participation.

Appendix G: Study Data

Table G1

ANOVA Table – BMI Regressed on SBWCC

	SS	*df*	*MS*	*F*	*p*
Regression	675.944	1	675.944	9.128	.003
Residual	9108.716	123	74.055		
Total	9784.659	124			

Table G2

Coefficients Table – BMI Regressed on SBWCC

	B	*SE*	*Beta*	*t*	*p*
(Constant)	12.940	5.888		2.198	.030
SBWCC	4.962	1.642	.263	3.021	.003

Table G3

Coefficients Table – High Blood Pressure Regressed on the LogSBWCC and SBWCC

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
SBWCC_mean	-3.162	10.753	.086	1	.769	.042
LnSBWCC by SBWCC_mean	.929	4.695	.039	1	.843	2.532
Constant	7.726	16.974	.207	1	.649	2266.331

Table G4

Coefficients Table – Stroke Regressed on the LogSBWCC and SBWCC

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
SBWCC_mean	-80596.226	432862.606	.035	1	.852	.000
LnSBWCC by SBWCC_mean	34448.307	185040.905	.035	1	.852	.
Constant	131511.353	706178.095	.035	1	.852	.

Table G5

Coefficients Table – Heart Disease Regressed on the LogSBWCC and SBWCC

	B	*S.E.*	*Wald*	*df*	*p*	*Exp(B)*
SBWCC_mean	13.022	21.050	.383	1	.536	452404.297
LnSBWCC by SBWCC_mean	-6.304	8.946	.497	1	.481	.002
Constant	-13.998	34.343	.166	1	.684	.000

Table G6

Coefficients Table – Diabetes Regressed on the LogSBWCC and SBWCC

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
SBWCC_mean	-3.510	17.139	.042	1	.838	.030
LnSBWCC by SBWCC_mean	1.168	7.406	.025	1	.875	3.215
Constant	9.584	27.425	.122	1	.727	14533.306

Table G7

Coeffiencients Table – High Blood Pressure Regressed on SBWCC

							95% C.I.	
	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*	Lower	Upper
SBWCC	1.038	.433	5.735	1	.017	.2.824	.1.207	.6.604
Constant	-4.389	1.579	7.732	1	.005	.012		

Table G8

Coefficients Table – Stroke Regressed on SBWCC

							95% C.I.for EXP(B)	
	B	*S.E.*	*Wald*	*df*	*p*	*Exp(B)*	Lower	Upper
SBWC	-1.175	2.047	.330	1	.566	.3.239	.059	178.869
Constant	-9.155	7.872	1.353	1	.245	.000		

Table G9

Coefficients Table – Heart Disease Regressed on SBWCC

							95% C.I.for EXP(B)	
	B	*S.E.*	*Wald*	*df*	*p*	*Exp(B)*	Lower	Upper
SBWCC	1.886	1.062	3.155	1	.076	6.591	.823	52.800
Constant	-10.459	4.207	6.180	1	.013	.000		

Table G10

Coefficients Table – Heart Disease Regressed on SBWCC

							95% C.I.for EXP(B)	
	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*	Lower	Upper
SBWCC	.810	.672	1.452	1	.228	2.248	.602	8.391
Constant	-5.283	2.504	4.449	1	.035	.005		

Table G11

ANOVA Table – BMI Regressed on Willingness to Ask for Help

	SS	*df*	*MS*	*F*	*p*
Regression	178.809	1	178.809	2.290	.133
Residual	9605.850	123	78.096		
Total	9784.659	124			

Table G12

Coefficients Table – BMI Regressed on Willingness to Ask for Help

	B	*SE*	*Beta*	*t*	*p*
(Constant)	26.781	2.630		10.184	.000
I feel uncomfortable asking others for help.	1.057	.698	.135	1.513	.133

Table G13

Coefficients Table – High Blood Pressure Regressed on the Logq15 and q15

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
q15	-.139	1.957	.005	1	.944	.871
q15 by Lnq15	-.146	.875	.028	1	.867	.864
Constant	1.897	2.916	.423	1	.515	6.667

Table G14

Coefficients Table – Stroke Regressed on the Logq15 and q15

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
q15	-182.814	29910.454	.000	1	.995	.000
q15 by Lnq15	87.912	13913.664	.000	1	.995	1.513E38

Constant	262.610	44124.481	.000	1	.995	1.122E114

Table G15

Coefficients Table – Heart Disease on the Logq15 and q15

	B	*SE*	*Wald*	*df*	*Sig.*	*Exp(B)*
q15	-157.328	24108.929	.000	1	.995	.000
q15 by Lnq15	62.634	9635.817	.000	1	.995	1.591E27
Constant	285.040	43003.403	.000	1	.995	6.183E123

Table G16

Coefficients Table – DM on the Logq15 and q15

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
q0015	-5.991	8.426	.506	1	.477	.003
q0015 by Lnq0015	2.370	3.574	.439	1	.507	10.694
Constant	12.799	13.553	.892	1	.345	361947.649

Table G17

Coefficients Table – High Blood Pressure Regressed on the Logq15 and q15

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
q15	.466	.184	6.403	1	.011	1.593
Constant	-2.373	.717	10.941	1	.001	.093

Table G18

Coefficients Table – Stroke Regressed on the and q15

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
q15	-.447	.868	.266	1	.606	.639

Constant	-3.353	2.795	1.439	1	.230	.035

Table G19

Coefficients Table – Heart Disease Regressed on the and q15

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
q15	1.484	.879	2.848	1	.091	4.409
Constant	-9.751	4.193	5.408	1	.020	.000

Table G20

Coefficients Table – DM Regressed on the and q15

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
q15	.476	.313	2.309	1	.129	1.610
Constant	-4.168	1.307	10.163	1	.001	.015

Table G21

Coefficients Table – High Blood Pressure Regressed on the LogEmotional Eating and Emotional Eating

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
Emot_Eating	1.903	2.018	.889	1	.346	6.703
Emot_Eating by LnEmot_Eat	-1.124	1.104	1.036	1	.309	.325
Constant	-1.394	2.365	.347	1	.556	.248

Table G22

Coefficients Table – High Blood Pressure Regressed on the LogPerceived Stress and Perceived Stress

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
PSS_Total	.475	.936	.258	1	.612	1.608
PSS_Total by LnPSS_Total	-.100	.204	.239	1	.625	.905
Constant	-3.532	7.323	.233	1	.630	.029

Table G23

Coefficients Table – Stroke Regressed on the LogEmotional Eating and Emotional Eating

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
Emot_Eating	-49725.003	92364.435	.290	1	.590	.000
Emot_Eating by LnEmot_Eat	23184.618	43068.703	.290	1	.590	.
Constant	72830.594	135270.982	.290	1	.590	.

Table G24

Coefficients Table – Stroke Regressed on the LogPerceived Stress and Perceived Stress

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
PSS_Total	-2883.765	22974.329	.016	1	.900	.000
PSS_Total by LnPSS_Total	650.288	5177.367	.016	1	.900	2.610E282
Constant	20171.870	161070.110	.016	1	.900	.

Table G25

Coefficients Table – Heart Disease Regressed on the LogEmotional Eating and Emotional Eating

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
Emot_Eating	-16.748	16.806	.993	1	.319	.000
Emot_Eating by LnEmot_Eat	11.383	11.121	1.048	1	.306	87796.843
Constant	20.756	18.138	1.310	1	.252	1.034E9

Table G26

Coefficients Table – Heart Disease Regressed on the LogPerceived Stress and Perceived Stress

	B	*S.E.*	*Wald*	*df*	*p*	*Exp(B)*
PSS_Total	-399.033	298.304	1.789	1	.181	.000
PSS_Total by LnPSS_Total	85.047	63.622	1.787	1	.181	8.615E36
Constant	3413.034	2544.143	1.800	1	.180	.

Table G27

Coefficients Table – DM Regressed on the LogEmotional Eating and Emotional Eating

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
Emot_Eating	.758	3.004	.064	1	.801	2.134
Emot_Eating by LnEmot_Eat	-.501	1.606	.097	1	.755	.606
Constant	1.622	3.579	.205	1	.650	5.065

Table G28

Coefficients Table – DM Regressed on the LogPerceived Stress and Perceived Stress

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
PSS_Total	1.015	1.503	.456	1	.500	2.758
PSS_Total by LnPSS_Total	-.229	.325	.497	1	.481	.795
Constant	-4.334	11.991	.131	1	.718	.013

Table G29

Coefficients Table – High Blood Pressure Regressed on the Emotional Eating and Perceived Stress

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
PSS_Total	.023	.027	.679	1	.410	1.023
Emot_Eating	-.190	.234	.658	1	.417	.827
Constant	.225	1.039	.047	1	.828	1.253

Table G30

Coefficients Table – Stroke Regressed on the Emotional Eating and Perceived Stress

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
PSS_Total	.253	.223	1.286	1	.257	1.288
Emot_Eating	-2.118	1.583	1.790	1	.181	.120
Constant	1.927	6.382	.091	1	.763	6.868

Table G31

Coefficients Table – Heart Disease Regressed on the Emotional Eating and Perceived Stress

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
PSS_Total	-.071	.075	.878	1	.349	.932
Emot_Eating	1.105	.898	1.514	1	.218	3.018
Constant	4.137	3.200	1.671	1	.196	62.584

Table G32

Coefficients Table – Diabetes Regressed on the Emotional Eating and Perceived Stress

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
PSS_Total	-.044	.047	.909	1	.340	.956
Emot_Eating	-.089	.374	.057	1	.811	.914
Constant	4.248	1.872	5.147	1	.023	69.980

Table G33

Multiple Regressions Summary Table

	B	*SE*	*Beta*	*t*	*p*
BMI Regressed on SBWCC (significant)					
SBWCC	4.962	1.642	.263	3.021	.003
BMI Regressed on Willingness to Ask for Help (not significant)					
SBWCC_mean	1.057	.698	.135	1.513	.133
BMI Regressed on Emotional Eating and Perceived Stress (significant)					
Emotional Eating	2.825	.936	.266	3.017	.003
PSS_Total	.151	.109	.122	1.384	.169

Table G34

Logistic Regressions Summary Table #1

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
High Blood Pressure Regressed on q15 (significant)						
SBWCC_mean	1.038	.433	5.735	1	.017	2.824
Stroked Regressed on q15 (not significant)						
q0015	-.447	.868	.266	1	.606	.639
Heart Disease Regressed on q15 (not significant)						
q0015	1.484	.879	2.848	1	.091	4.409
DM Regressed on q15 (not significant)						
q0015	.476	.313	2.309	1	.129	1.610
High Blood Pressure Regressed on the Emotional Eating and Perceived Stress (not significant)						
PSS_Total	.023	.027	.679	1	.410	1.023
Emot_Eating	-.190	.234	.658	1	.417	.827
Stroke Regressed on the Emotional Eating and Perceived Stress (not significant)						
PSS_Total	.253	.223	1.286	1	.257	1.288
Emot_Eating	-2.118	1.583	1.790	1	.181	.120
Heart Disease Regressed on the Emotional Eating and Perceived Stress (not significant)						
PSS_Total	-.071	.075	.878	1	.349	.932
Emot_Eating	1.105	.898	1.514	1	.218	3.018
Diabetes Regressed on the Emotional Eating and Perceived Stress (not significant)						
PSS_Total	-.044	.047	.909	1	.340	.956
Emot_Eating	-.089	.374	.057	1	.811	.914

Table G35

Logistic Regressions Summary Table #2

	B	*SE*	*Wald*	*df*	*p*	*Exp(B)*
High Blood Pressure Regressed on SBWCC (significant)						
SBWCC_mean	1.038	.433	5.735	1	.017	2.824
Stroke Regressed on SBWCC (not significant)						
SBWCC_mean	1.175	2.047	.330	1	.566	3.239
Heart Disease Regressed on SBWCC (not significant)						
SBWCC_mean	1.886	1.062	3.155	1	.076	6.591
DM Regressed on SBWCC (not significant)						
SBWCC_mean	.810	.672	1.452	1	.228	2.248

Curriculum Vitae

EDUCATION

Walden University Present
Minneapolis, MN
Doctoral Student in Clinical Psychology Program

Walden University
Minneapolis, MN
Masters of Science in Psychology March 2011-November 2013

Texas Woman's University
Denton, TX
Masters in Occupational Therapy August 2001-December2005

University of Texas at San Antonio
San Antonio, Texas
Bachelors of Science in Psychology August 1998-December 2000

St. Philip's College
San Antonio, Texas August 1995-December 1997
Associates of Applied Science in Occupational Therapy

EMPLOYMENT

Certified Occupational Therapy Assistant 1997-1998
Austin, Texas
Position: Certified Occupational Therapy Assistant
Responsibilities: I provided direct treatment to residence in a skilled nursing and rehabilitation center. I reviewed treatment plans and designed activities to meet the long-term objectives on the plan of care. I attended meetings with residents, staff, and family as part of planning and development for the overall care of the residents. I documented and maintained records in accordance with company policy and insurance regulations.

Manor Care Nursing and Rehabilitation 1998-2001
San Antonio, Texas
Temple, Texas
Position: Certified Occupational Therapy Assistant
Responsibilities: I provided direct treatment to residence in a skilled nursing and rehabilitation center. I reviewed treatment plans and designed activities to meet the long term objectives on the plan of care. I attended meetings with residents, staff, and family

as part of planning and development for the overall care of the residents. I documented and maintained records in accordance with company policy and insurance regulations. I managed the caseload for all disciplines to ensure that clients were receiving the correct direct minutes of service. I created reports, for the corporate office that examined staff and client time management. I provided training and conducted meetings for staff to promote a safer work environment.

House Cross Nursing and Rehabilitation 2001-2006
Copperas Cove, Texas
Harker Heights, Texas
Killeen, Texas
Position: Certified Occupational Therapy Assistant 2001-2005;
Occupational Therapist 2006
Responsibilities: I provided direct treatments to residence in five skilled nursing and rehabilitation centers. I reviewed treatment plans and design activities to meet the long-term objectives on the plan of care. I attended meetings with residents, staff, and family as part of planning and development for the overall care of the residents. I documented and maintained records in accordance with company policy and insurance regulations. I managed the caseload for all disciplines, in two facilities, to ensure that the clients were receiving the correct direct minutes of service. I created reports for the corporate office that examined staff and client time management. I provided training and conducted meetings for staff, to promote a safer work environment. In 2006 my duties expanded to include performing occupational therapy evaluations, reassessments, and discharges for clients in five skilled nursing homes. In addition I became the direct supervisor for five occupational therapy assistants.

Kidz Therapeze 2006-2013
Self-employed (contract)
Killeen, Texas
Position: Occupational Therapist
Responsibilities: I worked with a client population ranging in age from birth to 18 years. These clients had a variety of physical, emotional, and/or psychological diagnosis (Autism, Asperger's, global developmental delay, Down's Syndrome, chromosomal abnormalities, extreme prematurity, fine motor delays, oppositional defiant disorder, etc.). My duties included the evaluation, reassessment, and discharging of clients from skilled occupational therapy services. I also conducted parent education and training. My daily responsibilities included documentation, billing, supervision of students, and the direct supervision of certified occupational therapy assistants. The Occupational Therapy Assistants had a combined caseload of 60-100 clients.

Marathon Therapy 2013-present

Self-employed (contract)
Copperas Cove, Texas
Harker Heights, Texas
Killeen, Texas
Temple, Texas
Position: Occupational Therapist
Responsibilities: I work with a population ranging from pediatrics to geriatrics in the clients home. My duties include the evaluation, reassessment, and discharge of clients from skilled occupational therapy services. My daily responsibilities included documentation, billing, supervision of students, and the direct supervision of certified occupational therapy assistants. The occupational therapy assistants have a combined caseload of 20-30 clients. I also make referrals, when needed, for other services. I perform client and family education and training.

PRACTICUM

New Life Institute September 2013-present February 2014
Austin, Texas
Position: Practicum Student under the direct supervision of Dr. Ray Hawkins
Responsibilities: My duties include administering psychological tests, integrative report writing, individual counseling, and daily documentation of client sessions. I participate in peer group and individual supervision meetings. I am currently working on program development to obtain additional referrals the New Life Institute. My goal is to gain 750 total hours, no less than 200 hours of direct counseling and no less than 200 hours of assessment.

PROFESSIONAL AFFILIATIONS

Texas Psychological Association (2012-present)-Student member